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Monthly and Seasonal Mean Analyses

March, April, May
1987

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Monthly and Seasonal Mean Analyses

March, April, May 1987

Mean fields obtained from the archive of operational analyses

Met O 20 (Dynamical Climatology Branch)
Meteorological Office
London Road
Bracknell
Berkshire RG12 2SZ

February 1988

Note: Permission to quote from this document should be obtained from the Assistant Director of the above Meteorological Branch.

Monthly and Seasonal Mean Analyses

Introduction

The archive of operational analyses contains a continuous record of global analyses every 12 hours (00 and 12 GMT) from May 1983 onwards. They are copies of the update analyses produced in the operational numerical weather prediction system using the 15-level model (Bell and Dickinson 1987). In this booklet there are presented monthly and seasonal mean fields computed from the archived analyses for a single season. Since a season spans three calendar months, there are four sections. Sections 1, 2 and 3 contain charts of the monthly mean fields for each month, and section 4 contains charts of the seasonal mean fields. The seasonal means are the means of the fields in the first three sections, weighted according to the number of days in each month.

Each section contains a set of charts for the northern and southern hemispheres and a set for the tropics. In each hemisphere, polar stereographic projects have been used to prepare a chart of pressure at mean sea level and composite charts showing both height (contours) and wind (vectors and isotachs) at 850, 500, 250 and 100 mb. In the tropics the charts are presented on a latitude–longitude projection encircling the globe in three sections covering the longitudes 0°–120°E, 120°E–120°W and 120°W–0°. This projection has been used to produce a series of charts of wind vectors and isotachs at 850 and 250 mb. On all charts, contours are depicted as solid lines, wind vectors as arrows and isotachs as dashed lines.

When archiving was first undertaken, for May 1983, global fields were stored according to their coefficients in a series of spherical harmonics up to a triangular truncation of T40 (Swinbank 1984). Since this is roughly equivalent to a latitude–longitude grid with a resolution of 4.5° by 4.5°, the conversion from the model's standard grid of 1.5° by 1.875° to the spectral representation results in some smoothing of the fields. Subsequently, a new method for storing the archived fields was developed as a result of discussions within the Working Group on the Development of the Operational Suite (WGDOS). This method uses a compressed digital coding of the original model field, on its standard latitude–longitude grid, but with fewer significant figures (Lowther 1986). It was implemented on 18 December 1985 in a limited version. After the inclusion of more fields, and following monitoring to ensure that the two representations (i.e. truncated spectral and compressed grid-point) of the archived analyses were consistent, the spectral archive was terminated on 31 October 1986.

The contents of the archives may be examined by consulting the computer data set 'M20.NARCHIND', where the tape number, file number and data set name for each archived day may be found. The fields in the spectral archive are stored in the format required by the post-processing (p-p) package. Details of the format and of the subroutines to be used for accessing the data are described in the manual for the p-p package. Some examples are shown in Swinbank (1984). The fields in the daily grid-point archive are stored as printfiles (Lowther 1986). A list of the fields in each of the two versions of the daily archive is given in the relevant documentation.

The monthly and seasonal mean fields have been computed from the spectral archive up to the end of October 1986. Thereafter, they have been computed from the grid-point archive. The mean fields are held as computer data sets in Met O 20, in spectral or grid-point format, as appropriate, and are available for general use. Means for each month and season over three years of the spectral archive are also available. The mean fields that are held are as follows:

Field		Pressure level (mb)
Westerly wind component	(m/s)	1000*, 850, 700, 500, 400, 300, 250, 200, 150, 100, 70, 50
Southerly wind component	(m/s)	
Height	(dam)	
Temperature	(K)	
Relative humidity	(%)	1000*, 850, 700, 500, 400, 300
Pressure at mean sea level	(mb)	

* Fields at 1000 mb are held in the spectral archive. In the grid-point archive this level has been omitted and fields at 950 mb are held instead.

References

Bell, R.S. and Dickinson, A.	1987	The Meteorological Office operational numerical weather prediction system, Meteorological Office Scientific Paper No. 41, Met.O.979, HMSO.
Lowther, D.	1986	WGDOS Printfile Archive, Operational NWP Scheme, Documentation Paper No. 9.1, Met O 2b, Meteorological Office, Bracknell.
Swinbank, R.	1984	A system to archive operational analyses for research purposes. Met O 20 Technical Note No. II/218. Meteorological Office, Bracknell.

MARCH
1987

OPERATIONAL ARCHIVE MEANS.   MARCH   1987
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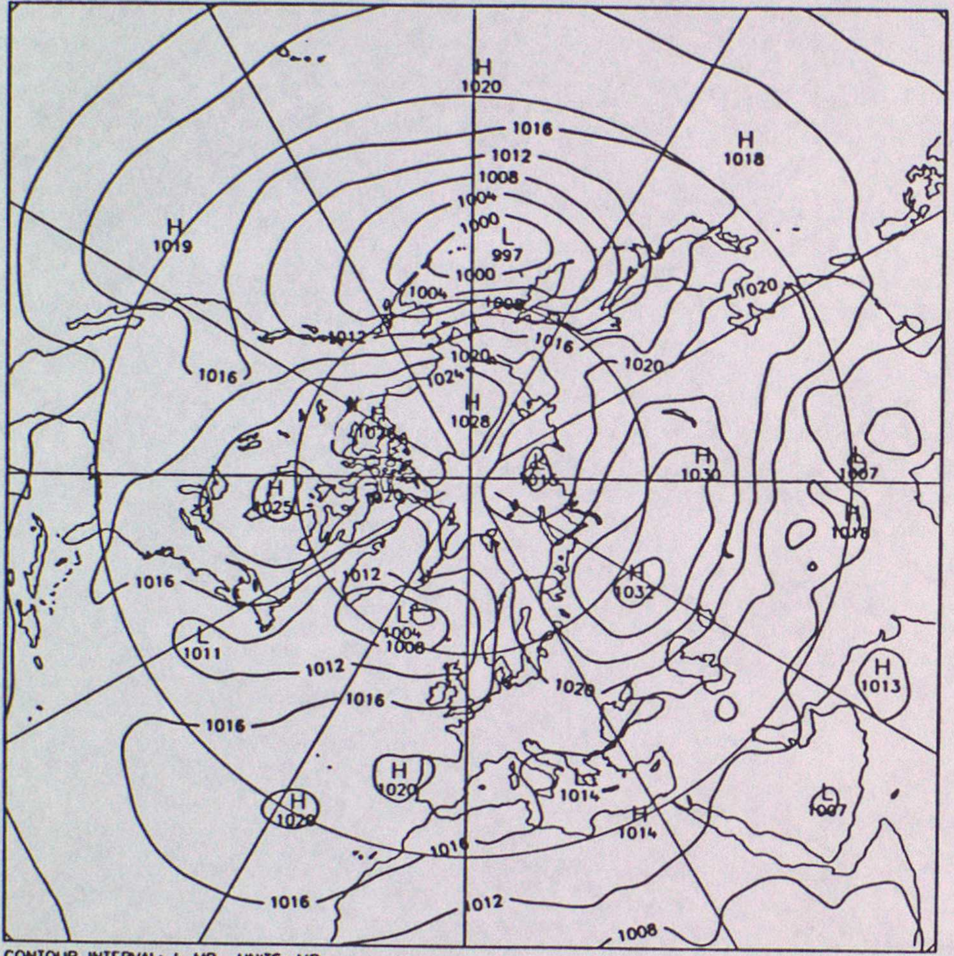
VALID AT 0Z ON 1/3/1987 DAY 60 DATA TIME 12Z ON 31/3/1987 DAY 90
SEA LEVEL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CONTOUR INTERVAL: 4 MB UNITS: MB

OPERATIONAL ARCHIVE MEANS.   MARCH   1987
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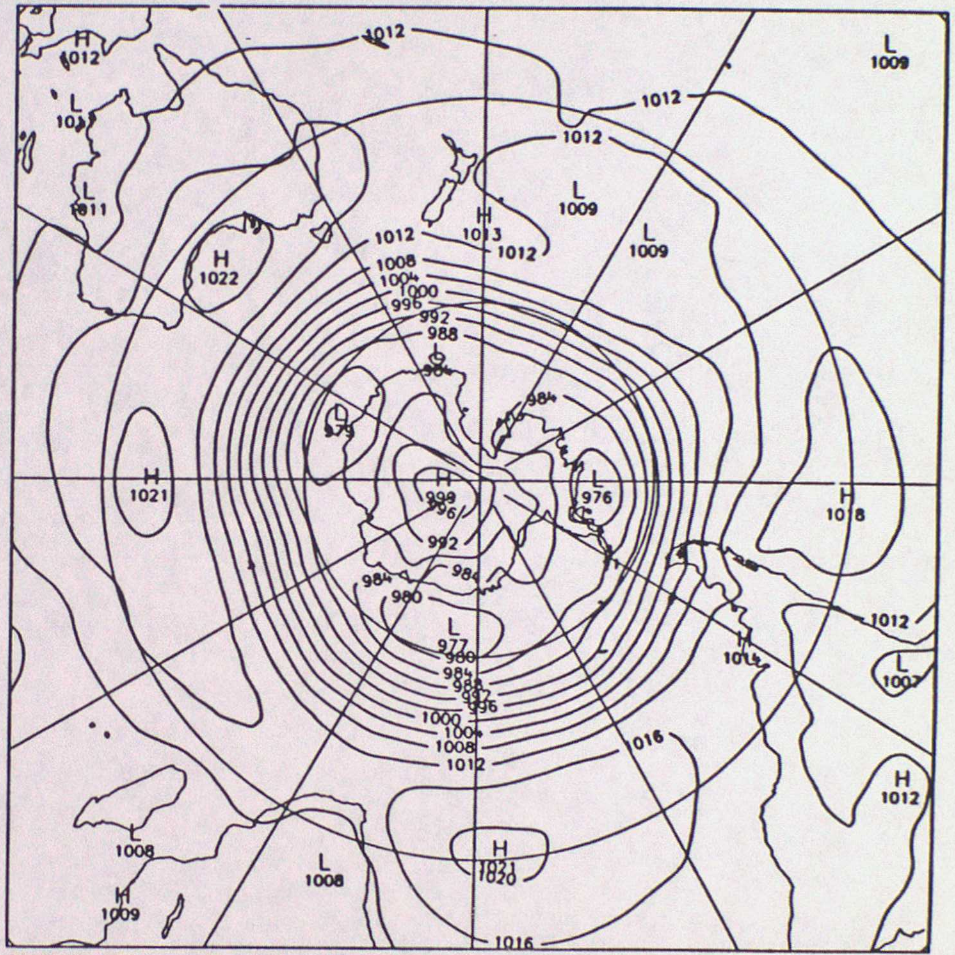
VALID AT 0Z ON 1/3/1987 DAY 60 DATA TIME 12Z ON 31/3/1987 DAY 90
SEA LEVEL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992
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L 1008
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H 1021 1020
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CONTOUR INTERVAL: 4 MB UNITS: MB

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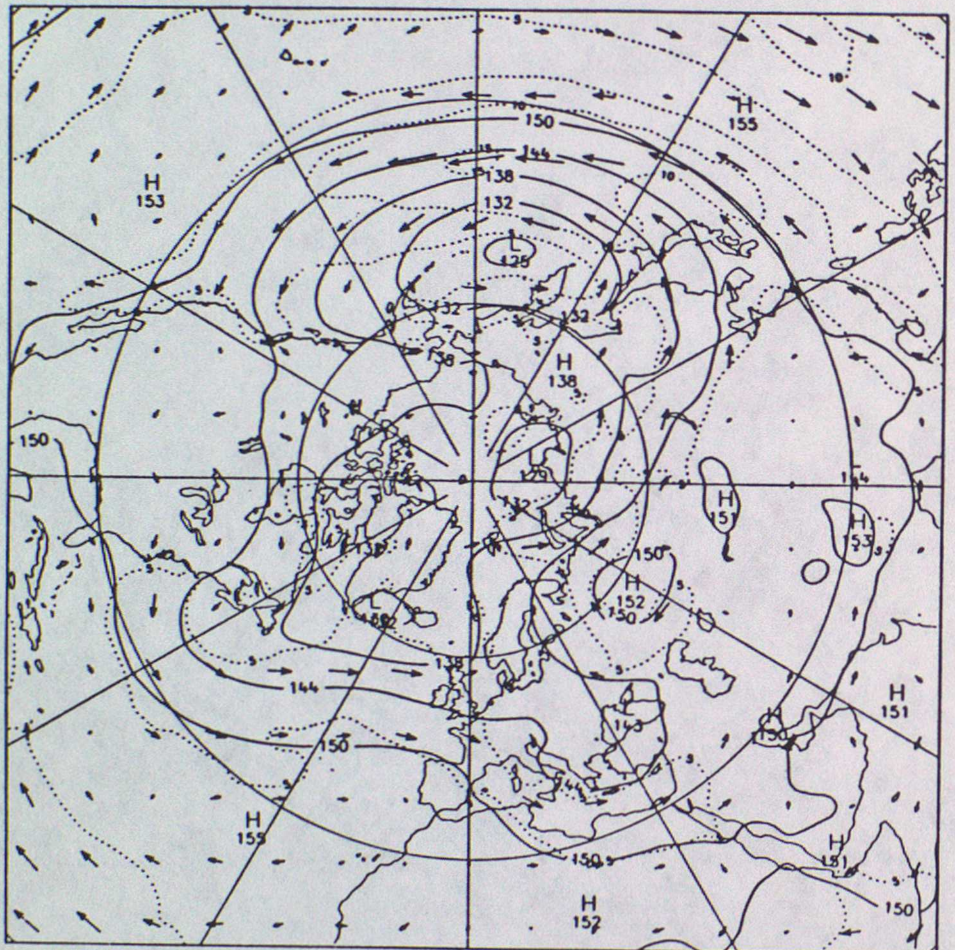
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H
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150
10
5

→ REPRESENTS 10 M/S CONTOUR INTERVAL: 60 M UNITS: 10 M

OPERATIONAL ARCHIVE MEANS. MARCH 1987
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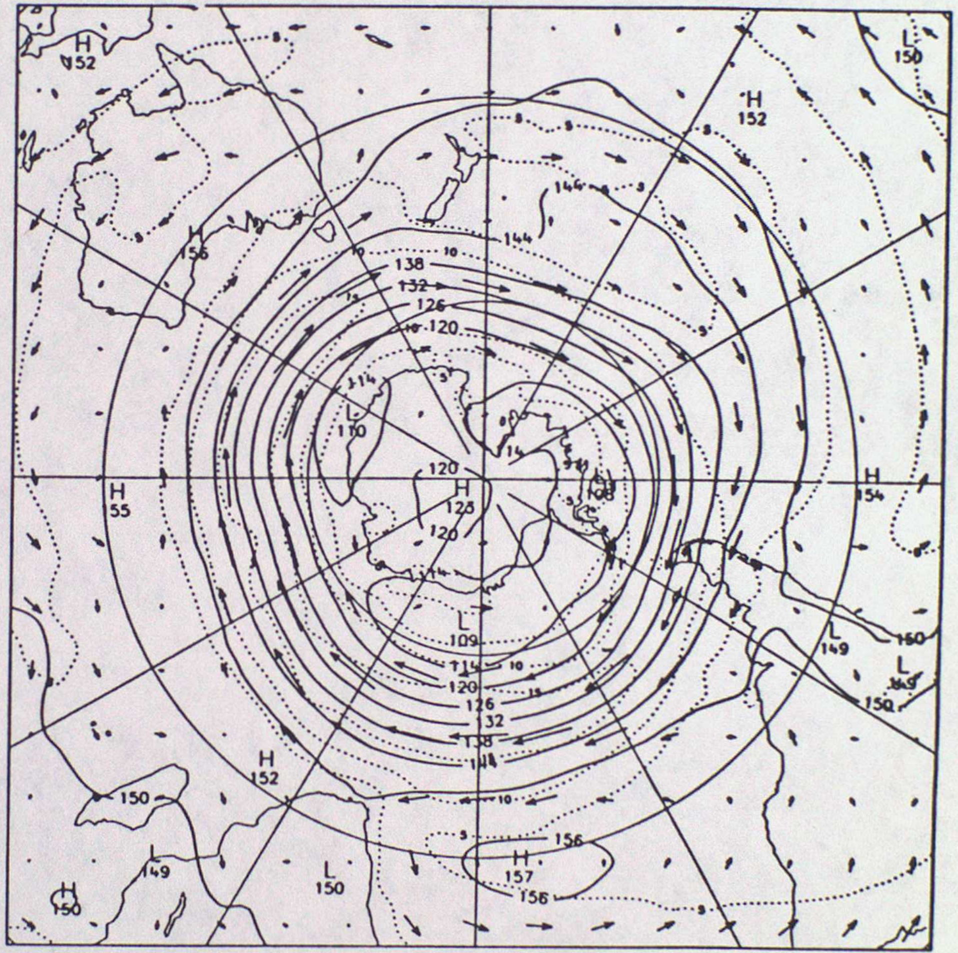
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L
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150
10
5

→ REPRESENTS 10 M/S CONTOUR INTERVAL: 60 M UNITS: 10 M

OPERATIONAL ARCHIVE MEANS.   MARCH   1987
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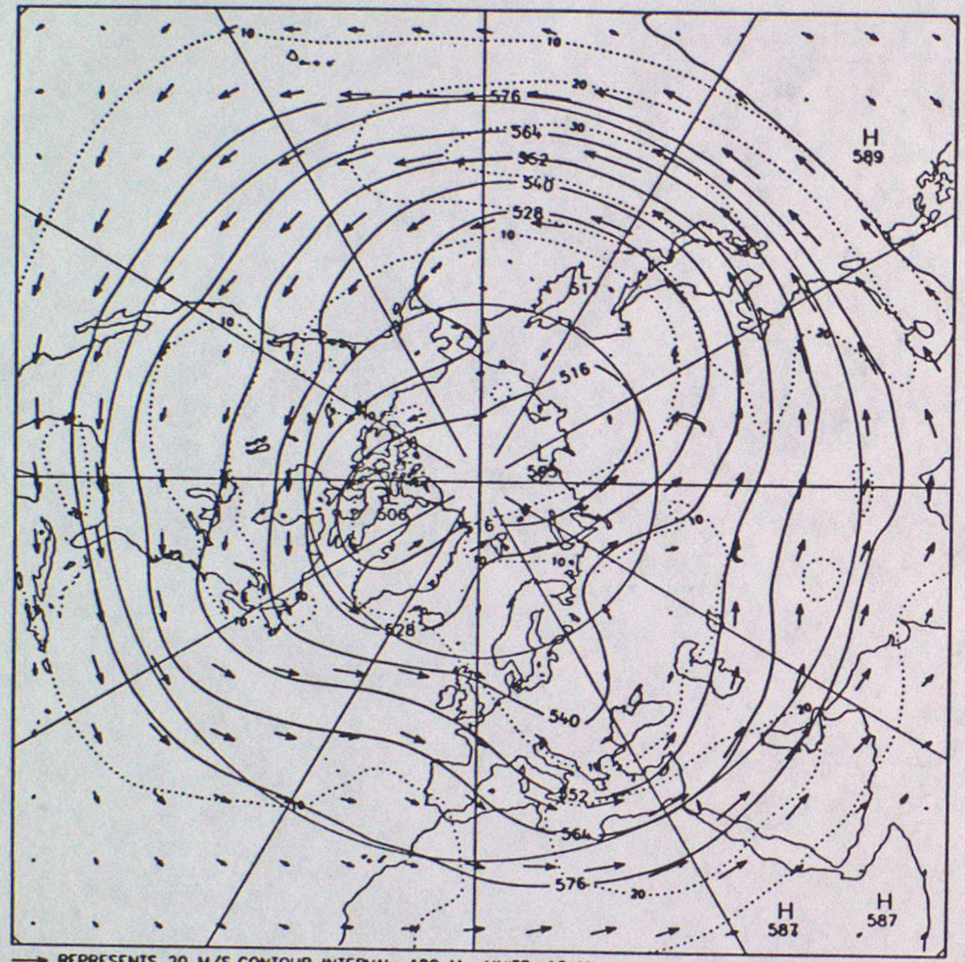
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H
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20
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→ REPRESENTS 20 M/S CONTOUR INTERVAL: 120 M UNITS: 10 M

OPERATIONAL ARCHIVE MEANS.   MARCH   1987
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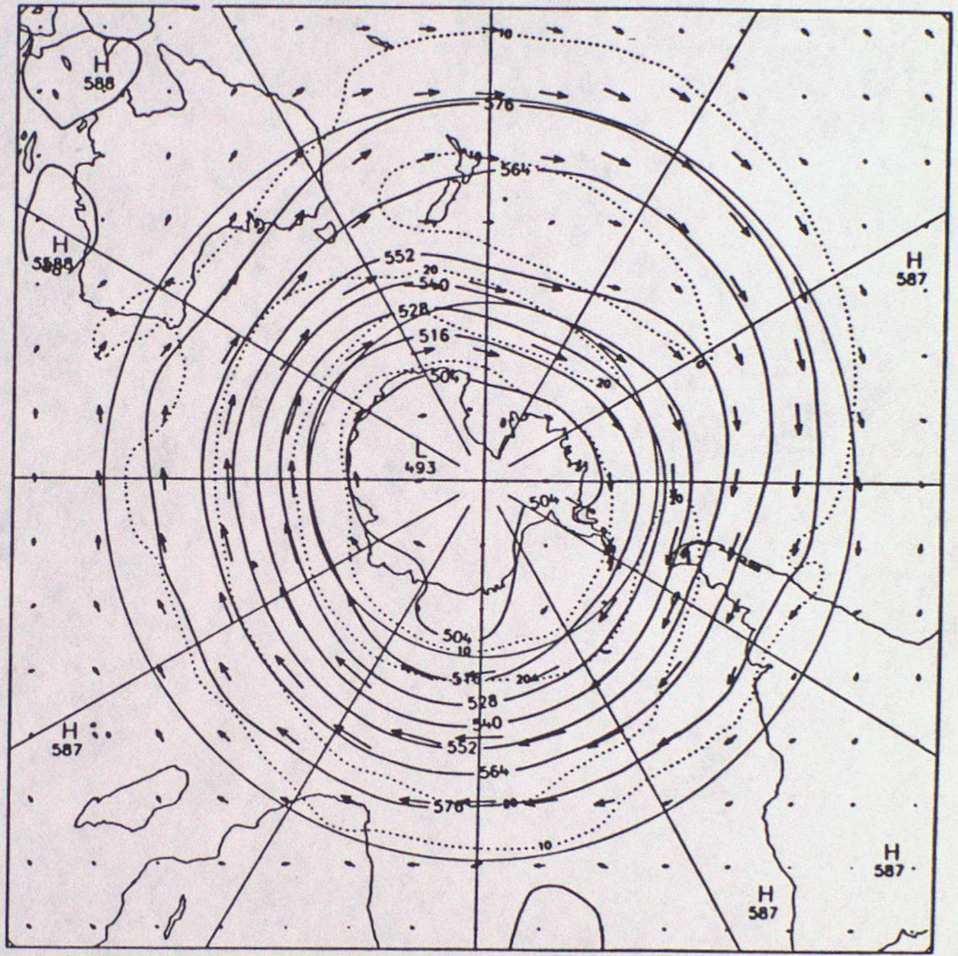
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587
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H
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587
10
20

→ REPRESENTS 20 M/S CONTOUR INTERVAL: 120 M UNITS: 10 M

OPERATIONAL ARCHIVE MEANS.   MARCH   1987
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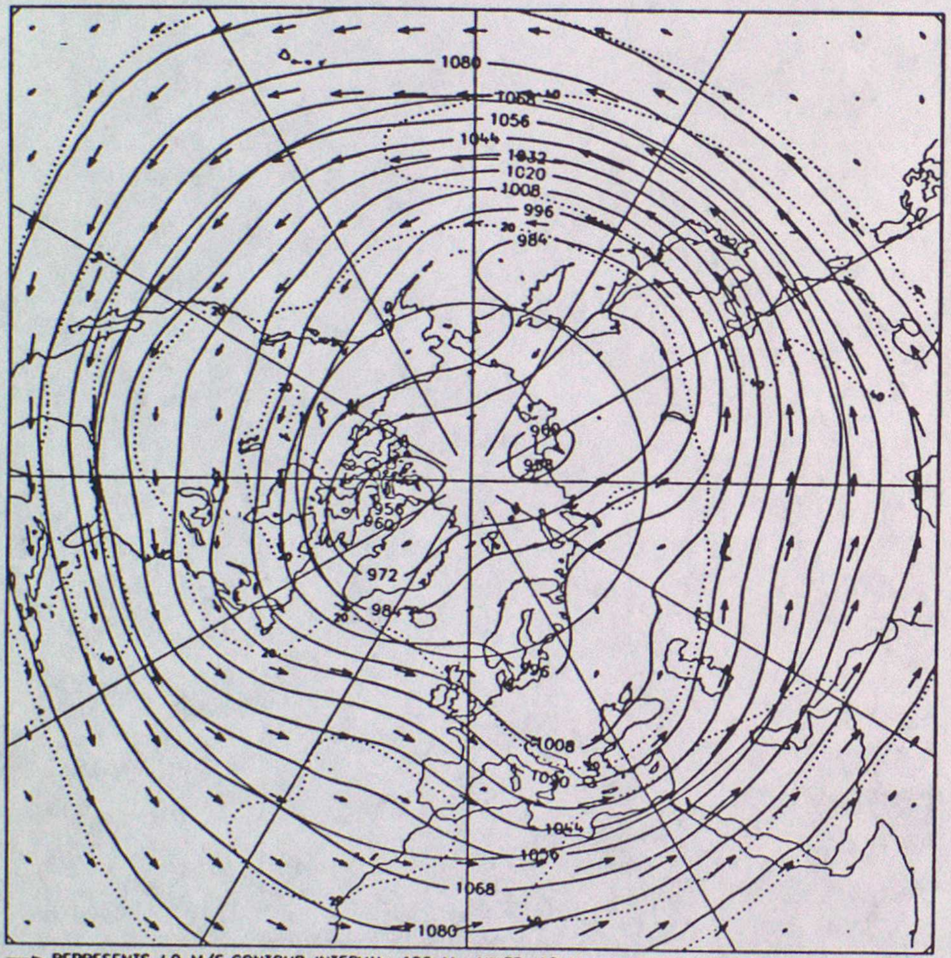
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→ REPRESENTS 40 M/S CONTOUR INTERVAL: 120 M UNITS: 10 M

OPERATIONAL ARCHIVE MEANS.   MARCH   1987
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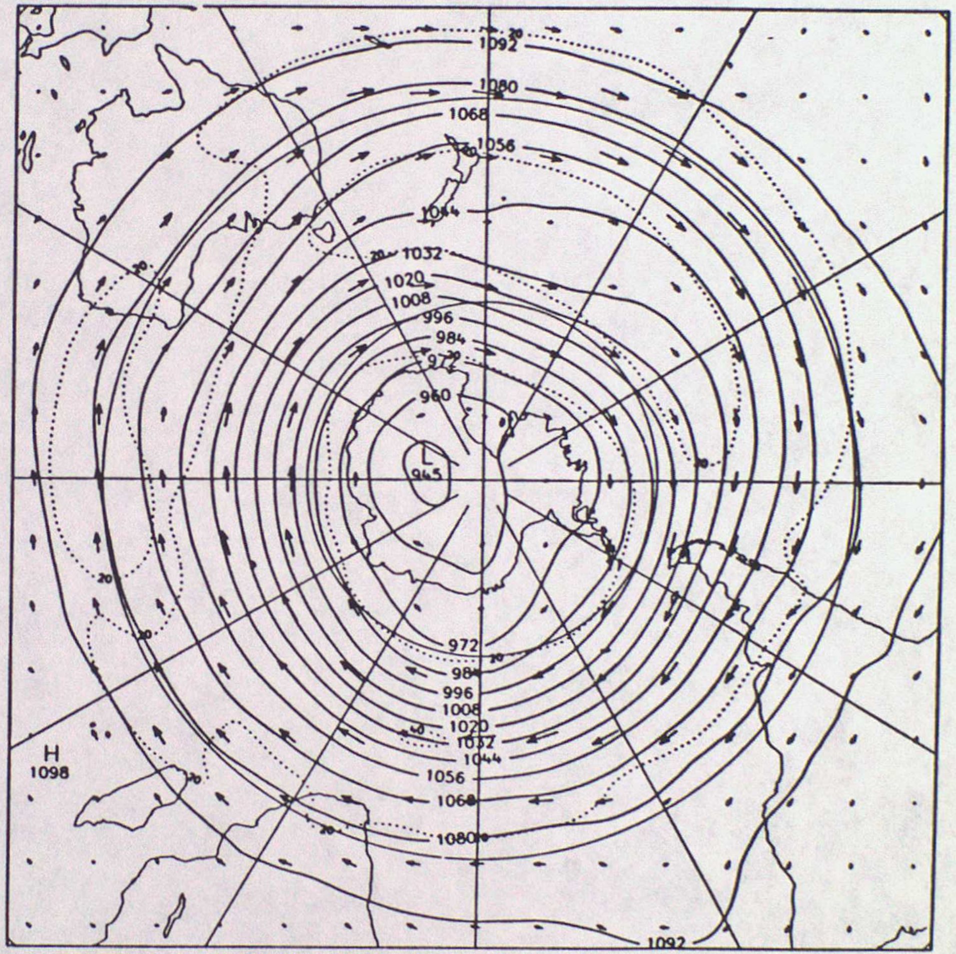
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→ REPRESENTS 40 M/S CONTOUR INTERVAL: 120 M UNITS: 10 M

OPERATIONAL ARCHIVE MEANS. MARCH 1987
HEIGHTS, WIND ARROWS AND ISOTACHS.
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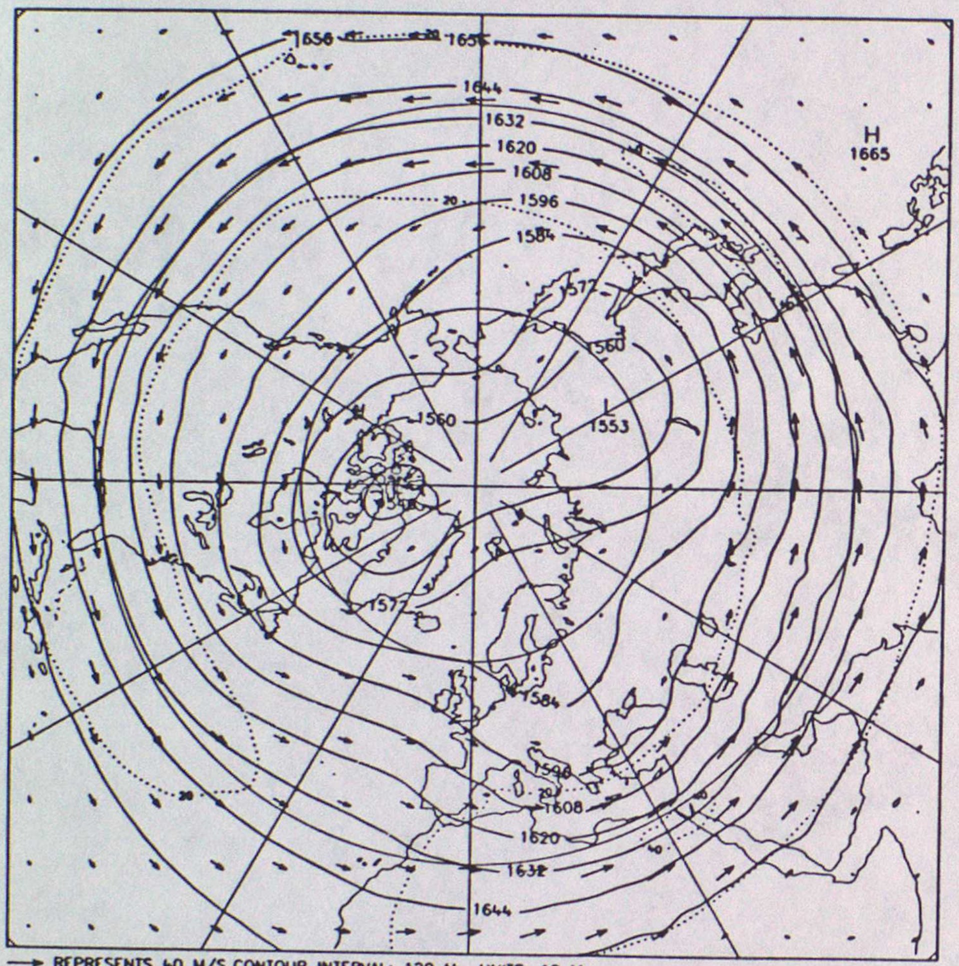
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→ REPRESENTS 40 M/S CONTOUR INTERVAL: 120 M UNITS: 10 M

OPERATIONAL ARCHIVE MEANS. MARCH 1987
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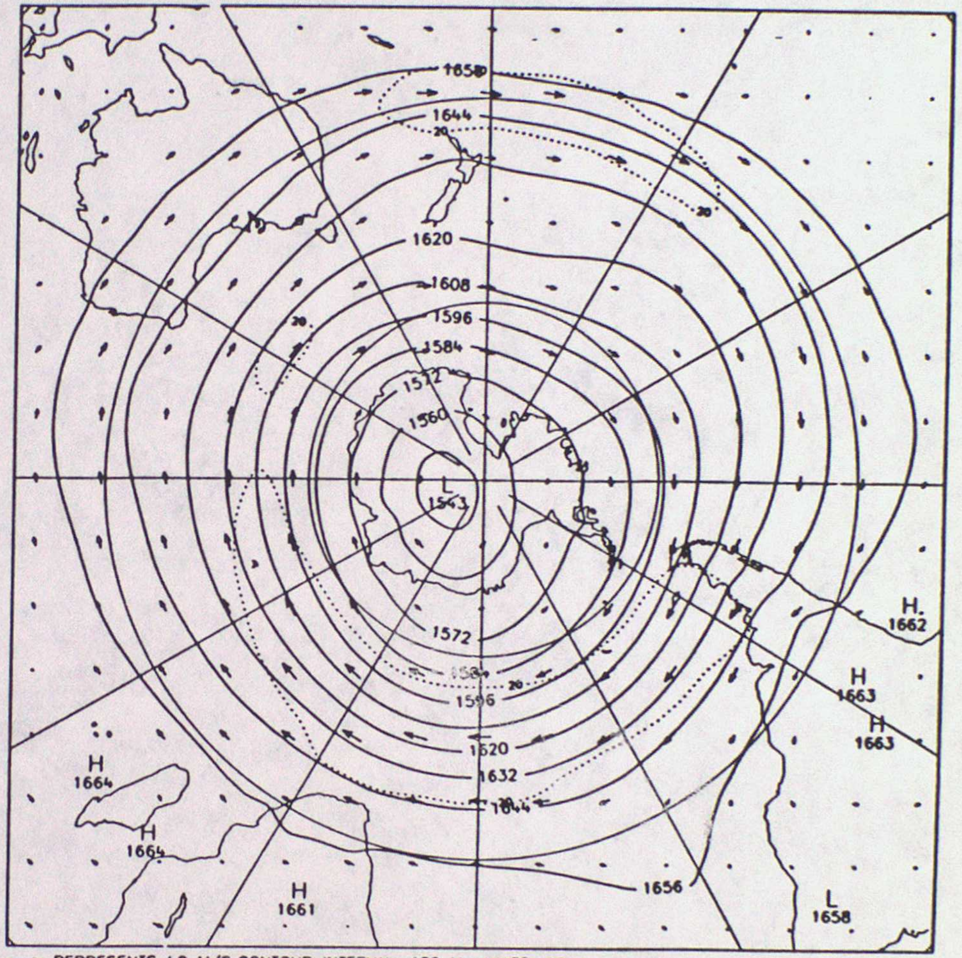
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→ REPRESENTS 40 M/S CONTOUR INTERVAL: 120 M UNITS: 10 M

OPERATIONAL ARCHIVE MEANS. MARCH 1987
WIND ARROWS AND ISOTACHS BETWEEN LATS. 45 N - 45 S.
VALID AT 0Z ON 1/3/1987 DAY 60 DATA TIME 12Z ON 31/3/1987 DAY 90
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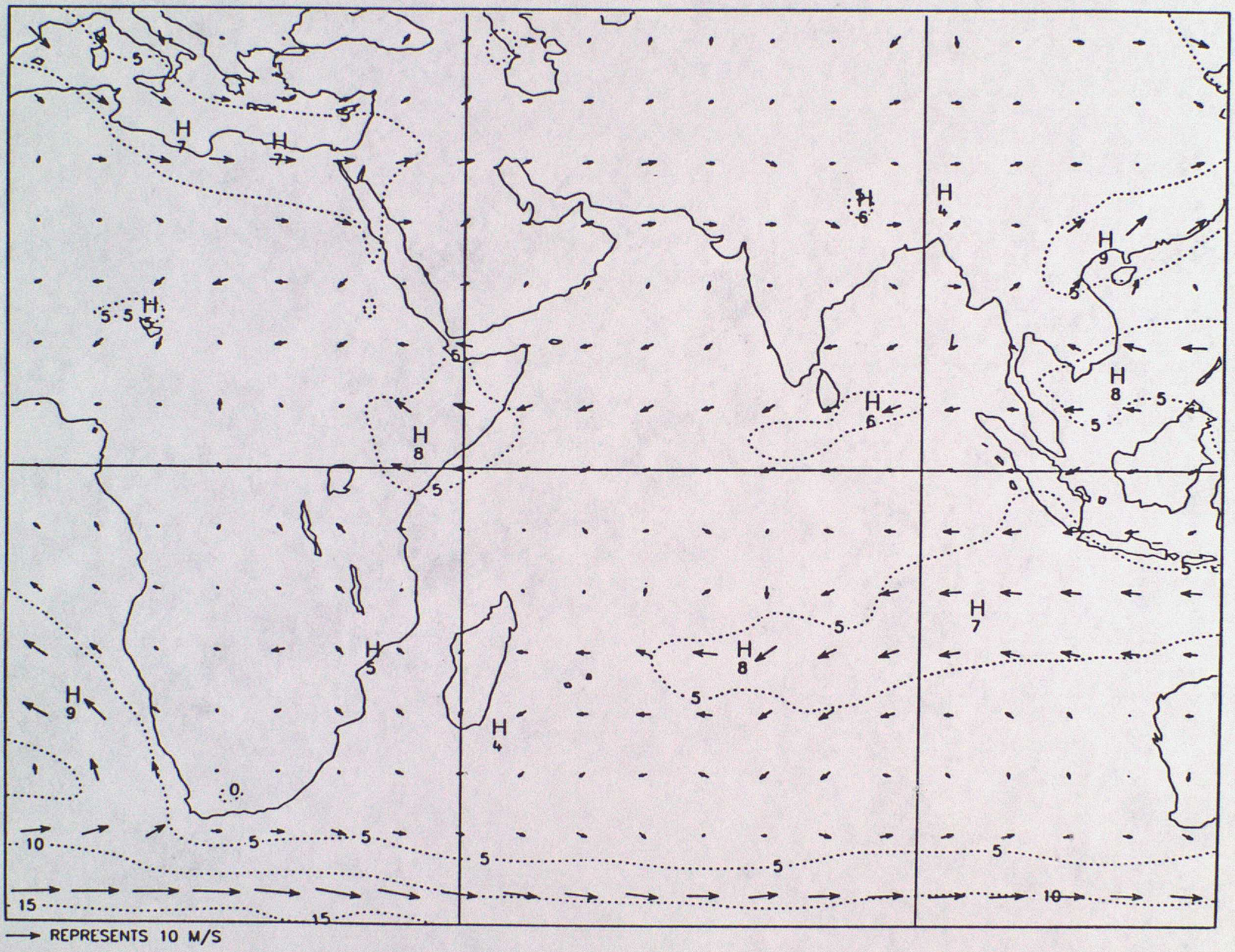
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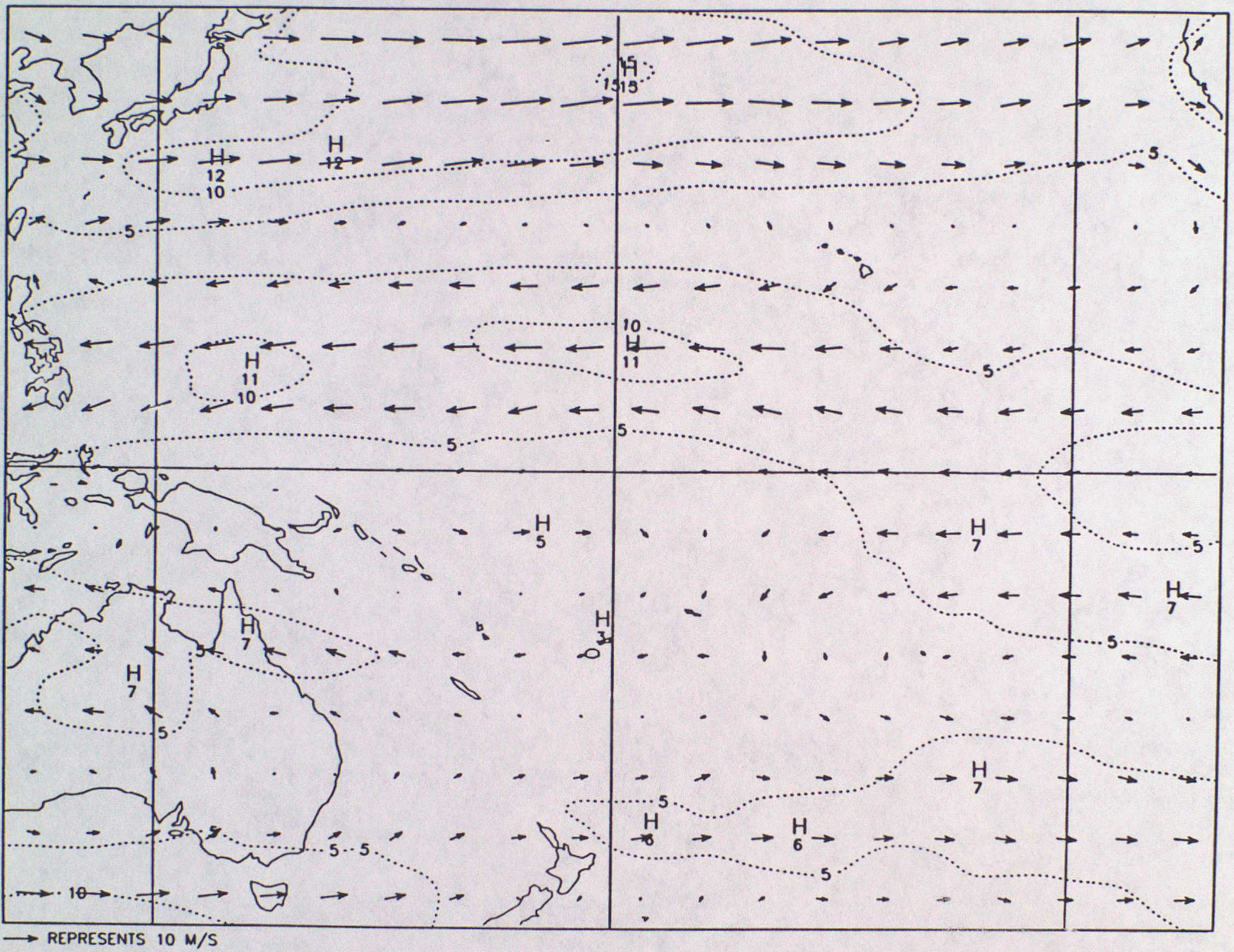
→ REPRESENTS 10 M/S

OPERATIONAL ARCHIVE MEANS.   MARCH   1987
WIND ARROWS AND ISOTACHS   BETWEEN LATS. 45 N - 45 S.
VALID AT 0Z ON 1/3/1987 DAY 60   DATA TIME 12Z ON 31/3/1987 DAY 90
850 MBS.   BETWEEN LONGS. 120 E - 120 W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→ REPRESENTS 10 M/S

OPERATIONAL ARCHIVE MEANS.   MARCH   1987
WIND ARROWS AND ISOTACHS   BETWEEN LATS. 45 N - 45 S.
VALID AT   0Z ON 1/3/1987 DAY 60   DATA TIME 12Z ON 31/3/1987 DAY 90
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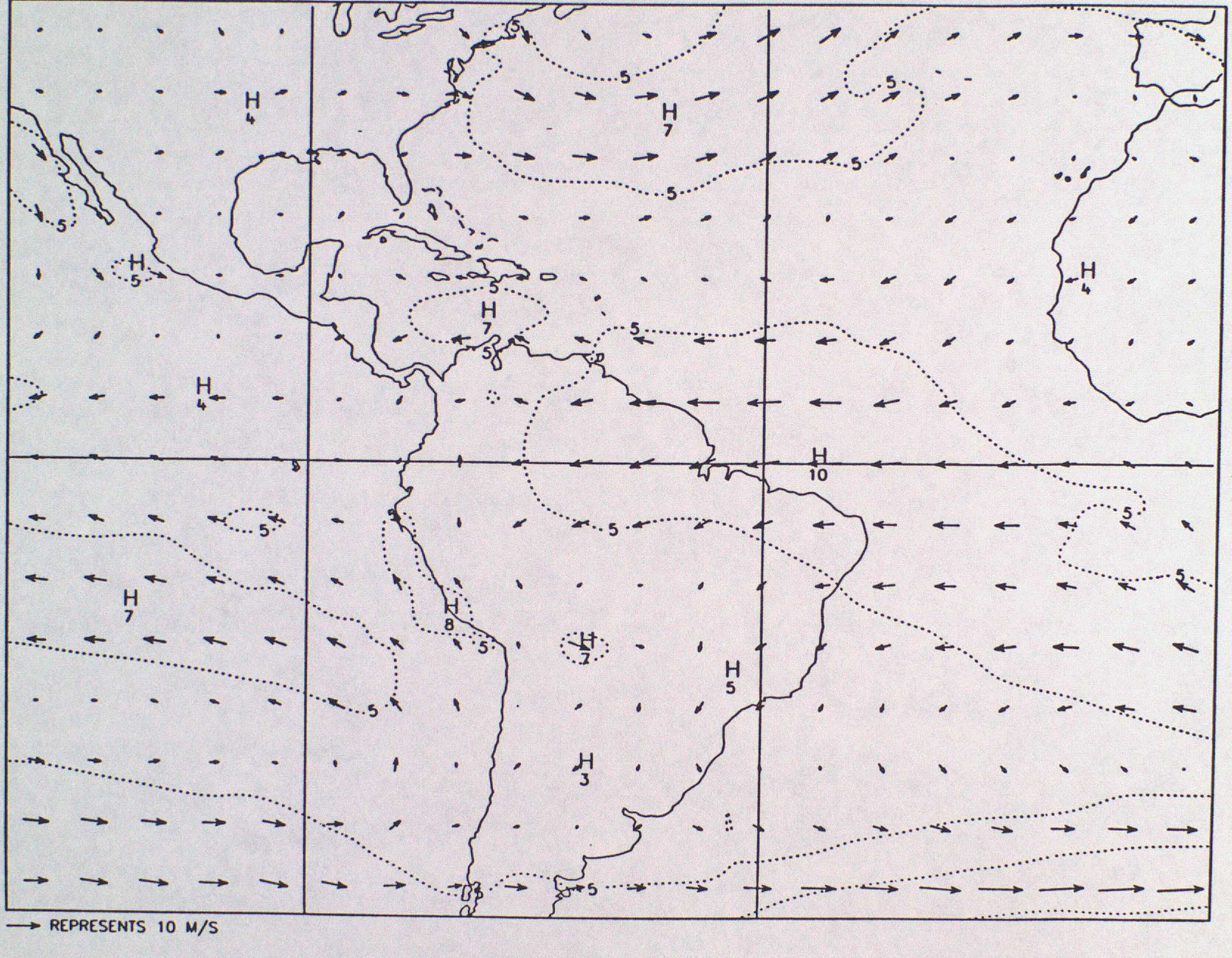
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→ REPRESENTS 10 M/S

OPERATIONAL ARCHIVE MEANS. MARCH 1987
WIND ARROWS AND ISOTACHS BETWEEN LATS. 45 N - 45 S.
VALID AT 0Z ON 1/3/1987 DAY 60 DATA TIME 12Z ON 31/3/1987 DAY 90
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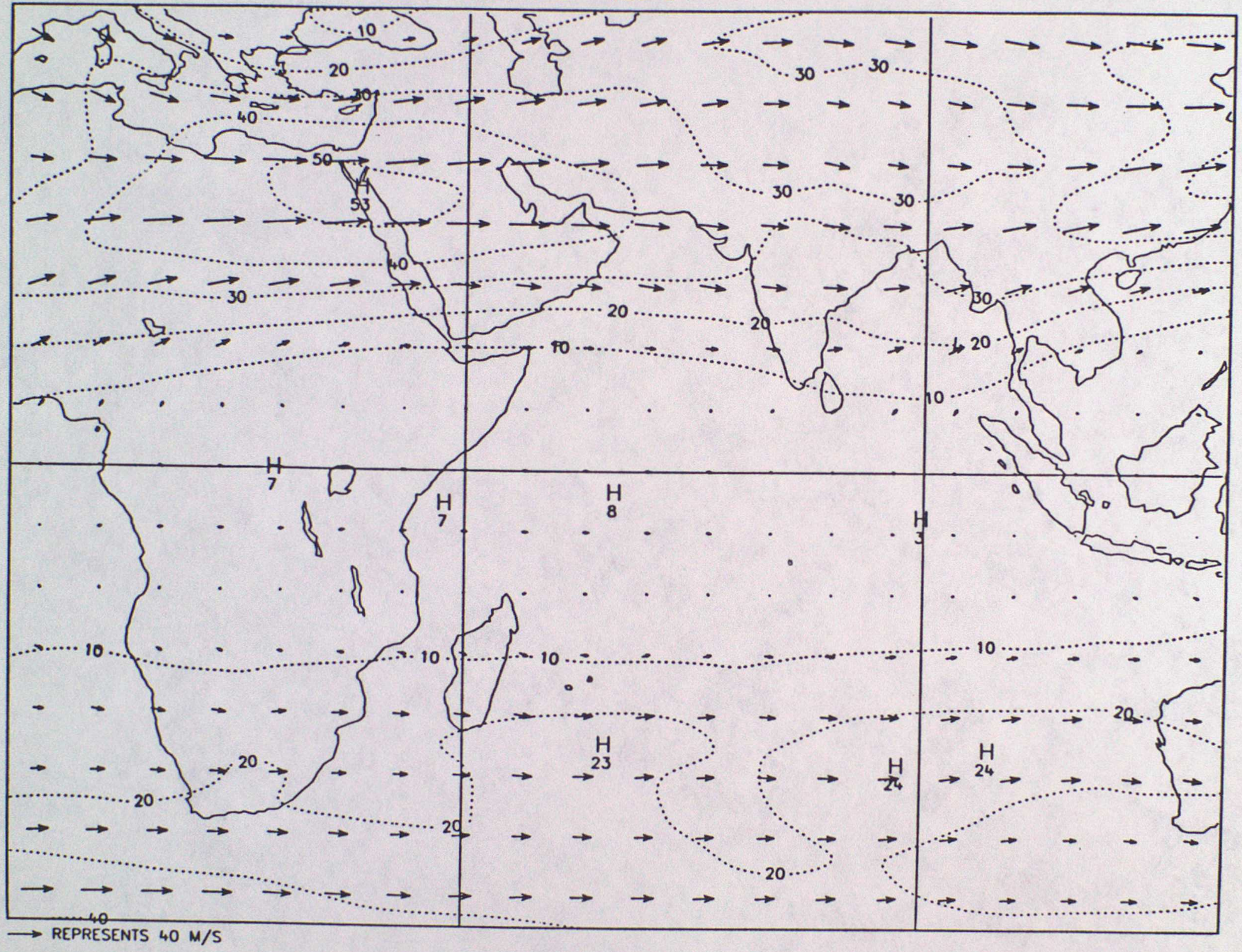
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40
→ REPRESENTS 40 M/S

OPERATIONAL ARCHIVE MEANS.   MARCH   1987
WIND ARROWS AND ISOTACHS BETWEEN LATS. 45 N - 45 S.
VALID AT 0Z ON 1/3/1987 DAY 60 DATA TIME 12Z ON 31/3/1987 DAY 90
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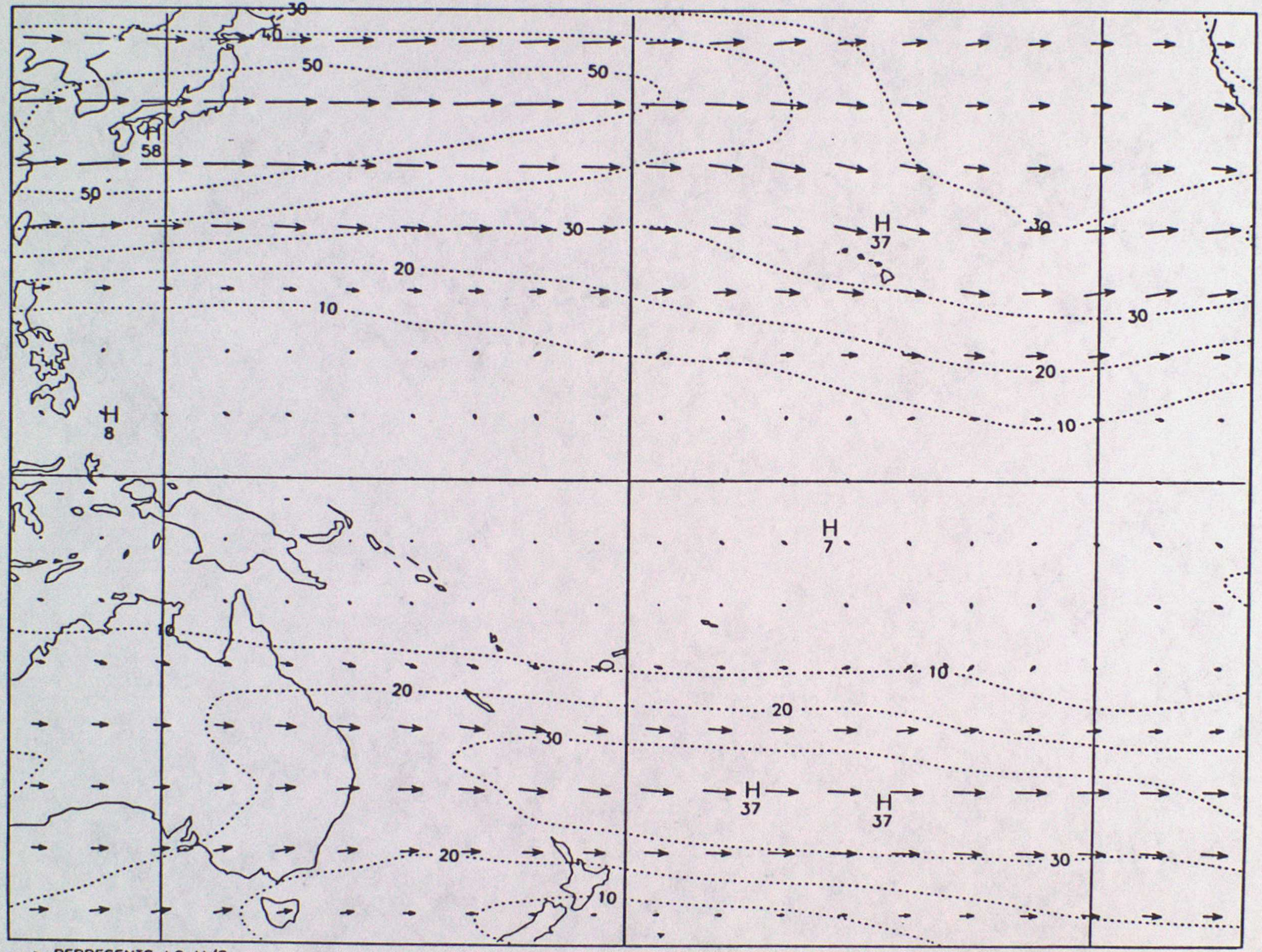
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→ REPRESENTS 40 M/S

OPERATIONAL ARCHIVE MEANS. MARCH 1987
WIND ARROWS AND ISOTACHS BETWEEN LATS. 45 N - 45 S.
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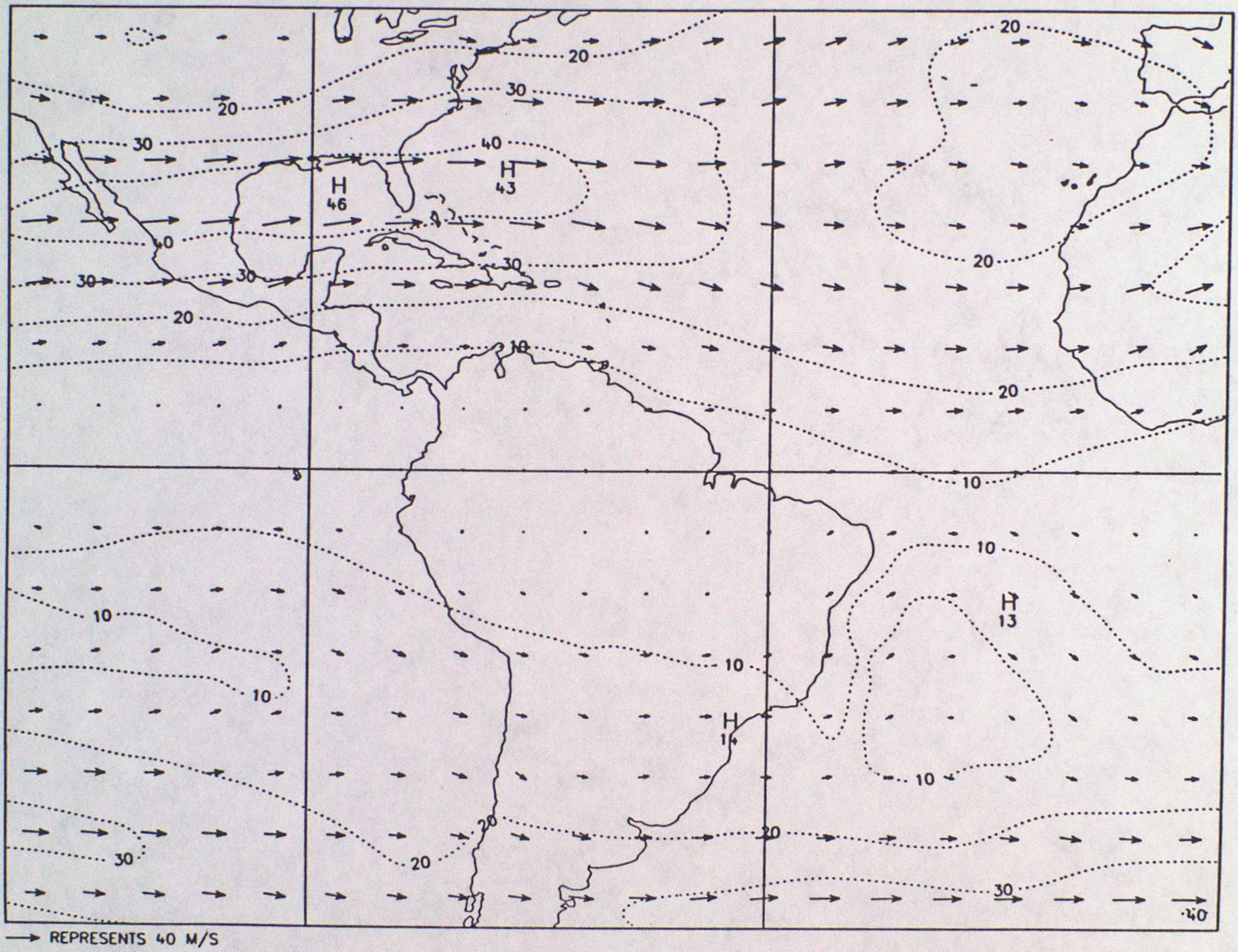
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→ REPRESENTS 40 M/S
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APRIL
1987

OPERATIONAL ARCHIVE MEANS. APRIL 1987
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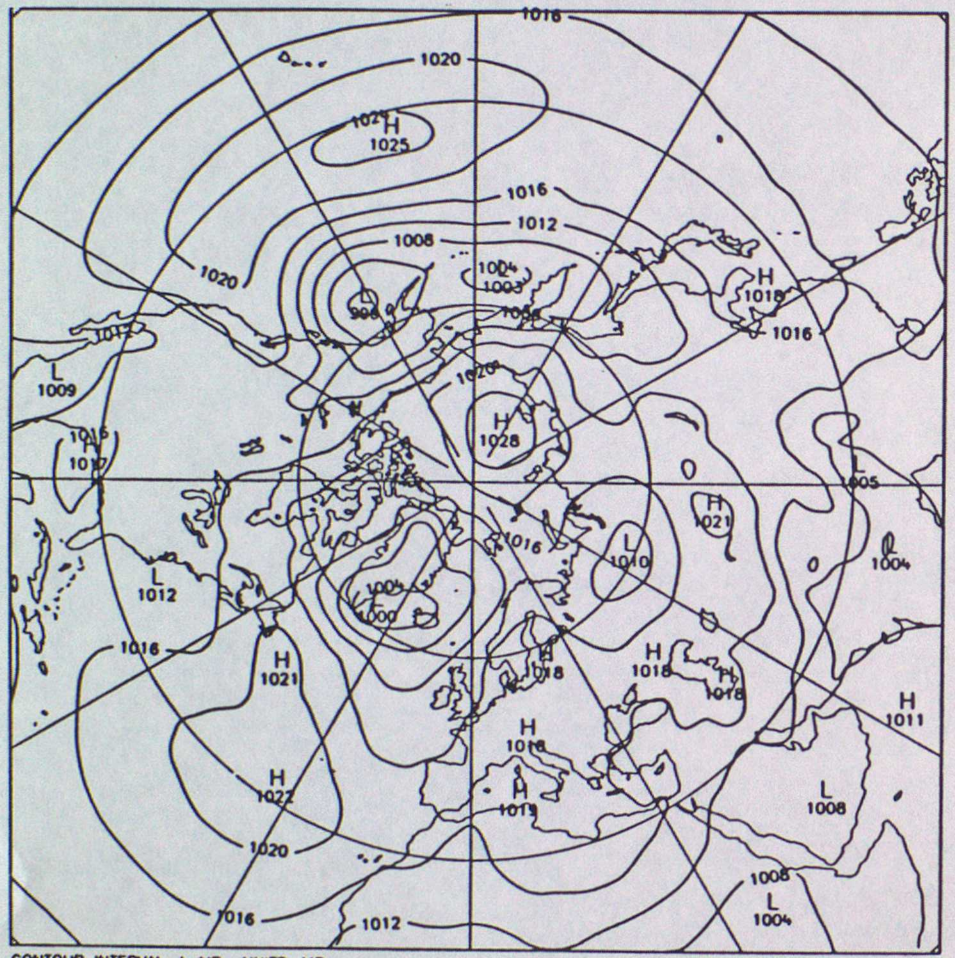
SEA LEVEL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CONTOUR INTERVAL: 4 MB UNITS: MB

OPERATIONAL ARCHIVE MEANS. APRIL 1987
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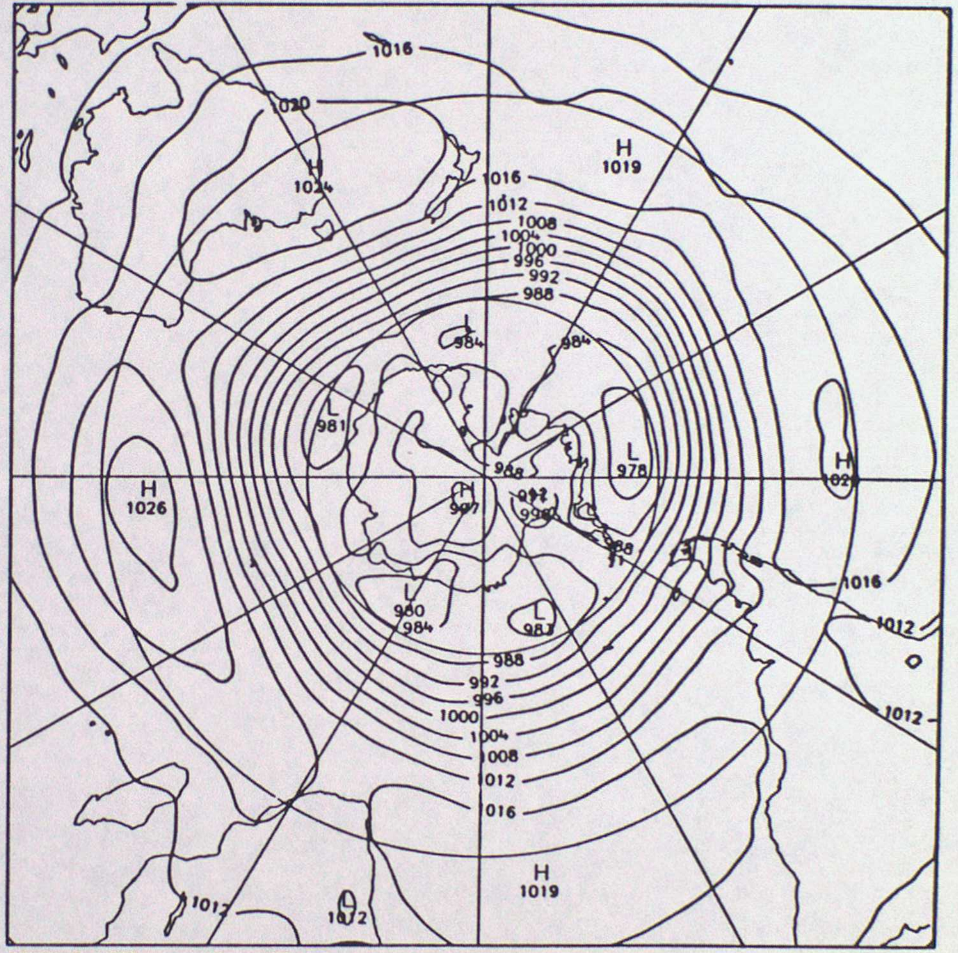
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CONTOUR INTERVAL: 4 MB UNITS: MB

OPERATIONAL ARCHIVE MEANS. APRIL 1987
HEIGHTS, WIND ARROWS AND ISOTACHS.
VALID AT 0Z ON 1/4/1987 DAY 91 DATA TIME 12Z ON 30/4/1987 DAY 120
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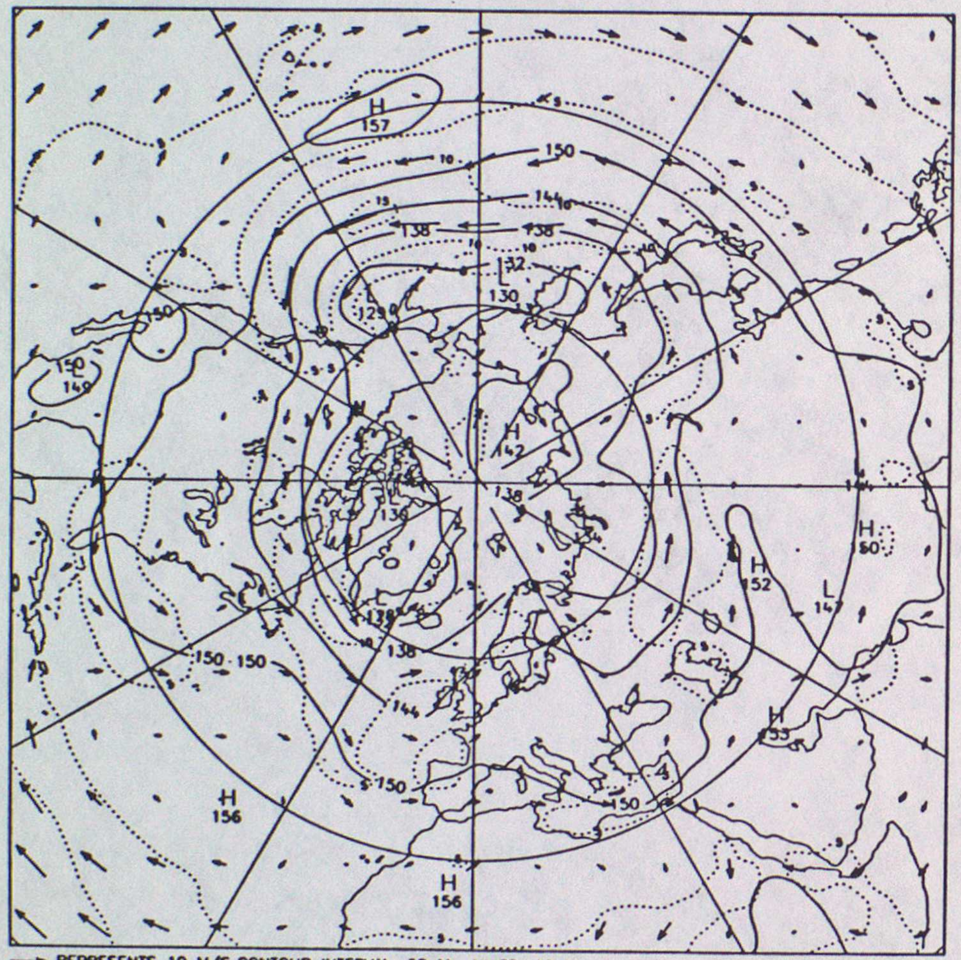
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→ REPRESENTS 10 M/S CONTOUR INTERVAL: 60 M UNITS: 10 M

OPERATIONAL ARCHIVE MEANS. APRIL 1987
HEIGHTS, WIND ARROWS AND ISOTACHS.
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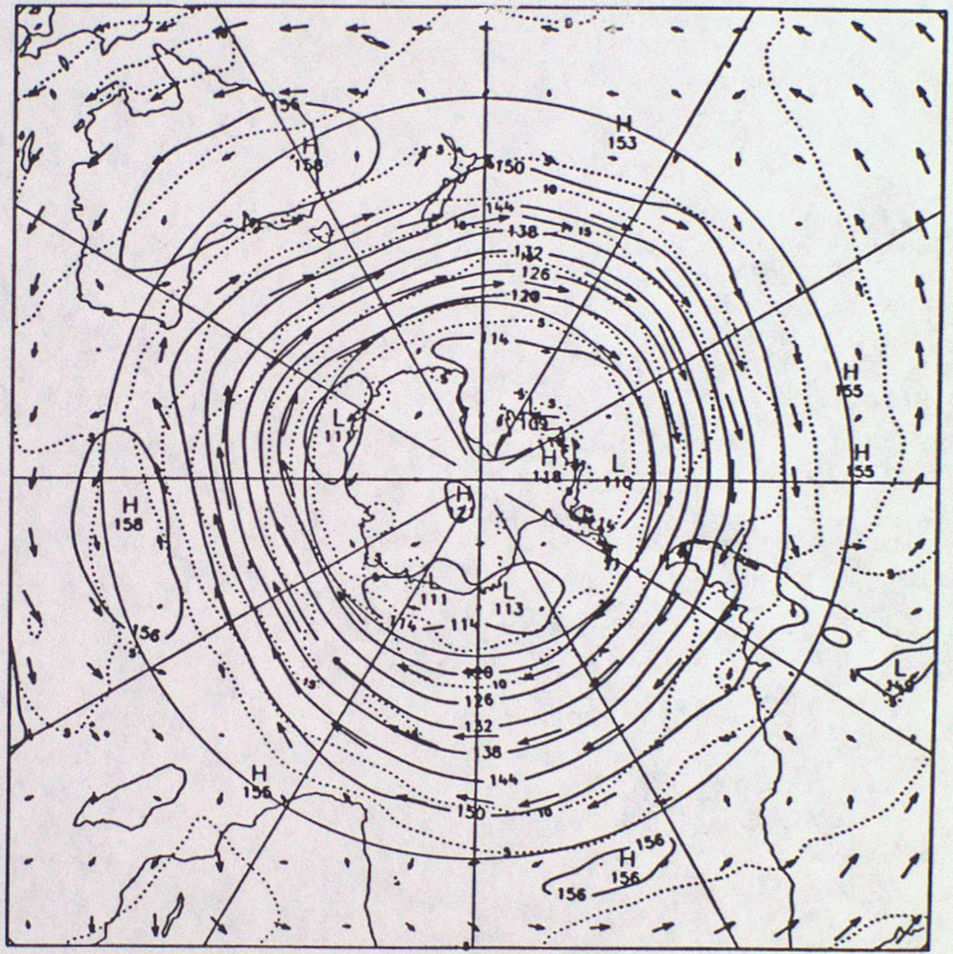
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→ REPRESENTS 10 M/S CONTOUR INTERVAL: 60 M UNITS: 10 M

OPERATIONAL ARCHIVE MEANS. APRIL 1987
HEIGHTS, WIND ARROWS AND ISOTACHS.
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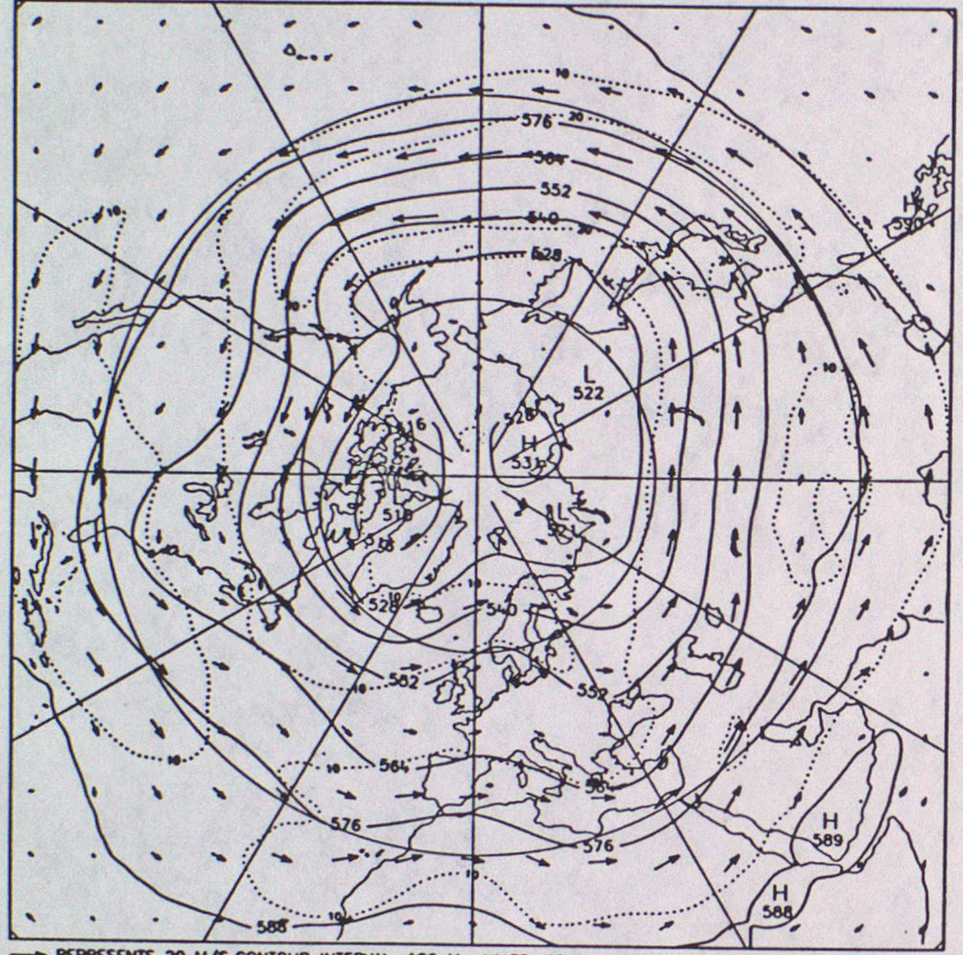

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→ REPRESENTS 20 M/S CONTOUR INTERVAL: 120 M UNITS: 10 M

OPERATIONAL ARCHIVE MEANS. APRIL 1987
HEIGHTS, WIND ARROWS AND ISOTACHS.
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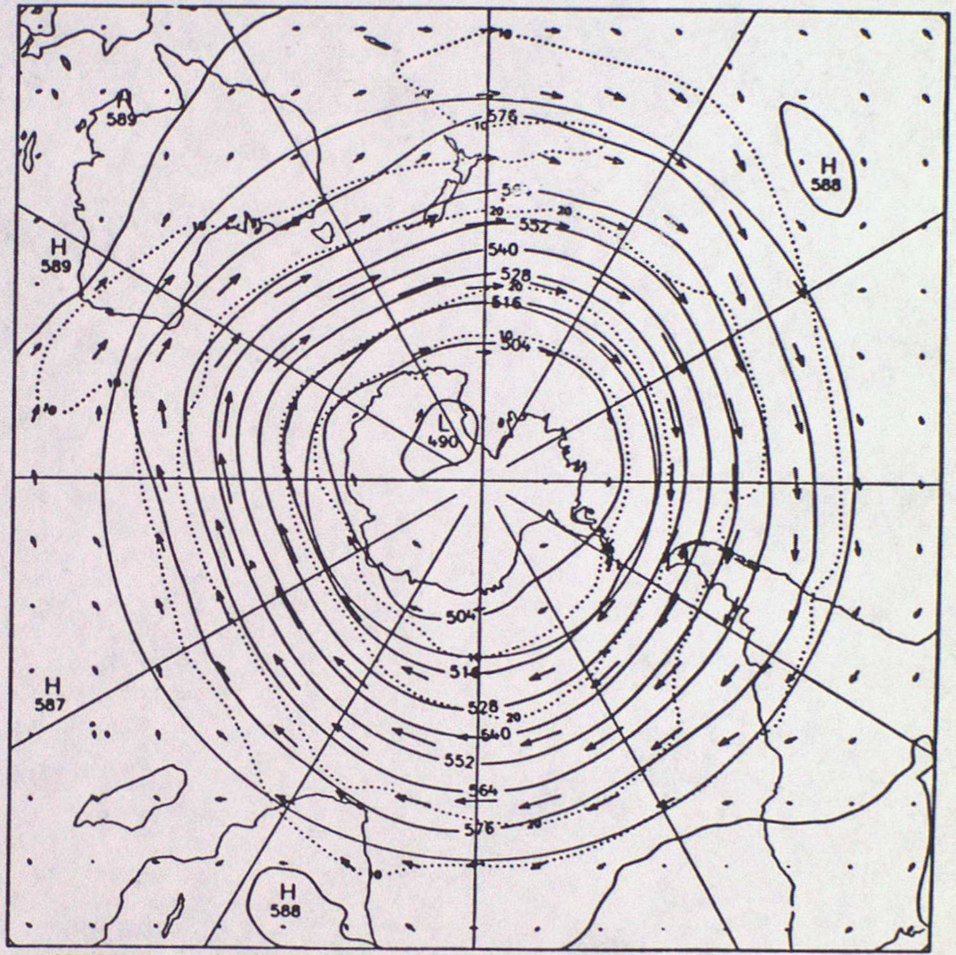

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→ REPRESENTS 20 M/S CONTOUR INTERVAL: 120 M UNITS: 10 M

OPERATIONAL ARCHIVE MEANS. APRIL 1987
HEIGHTS, WIND ARROWS AND ISOTACHS.
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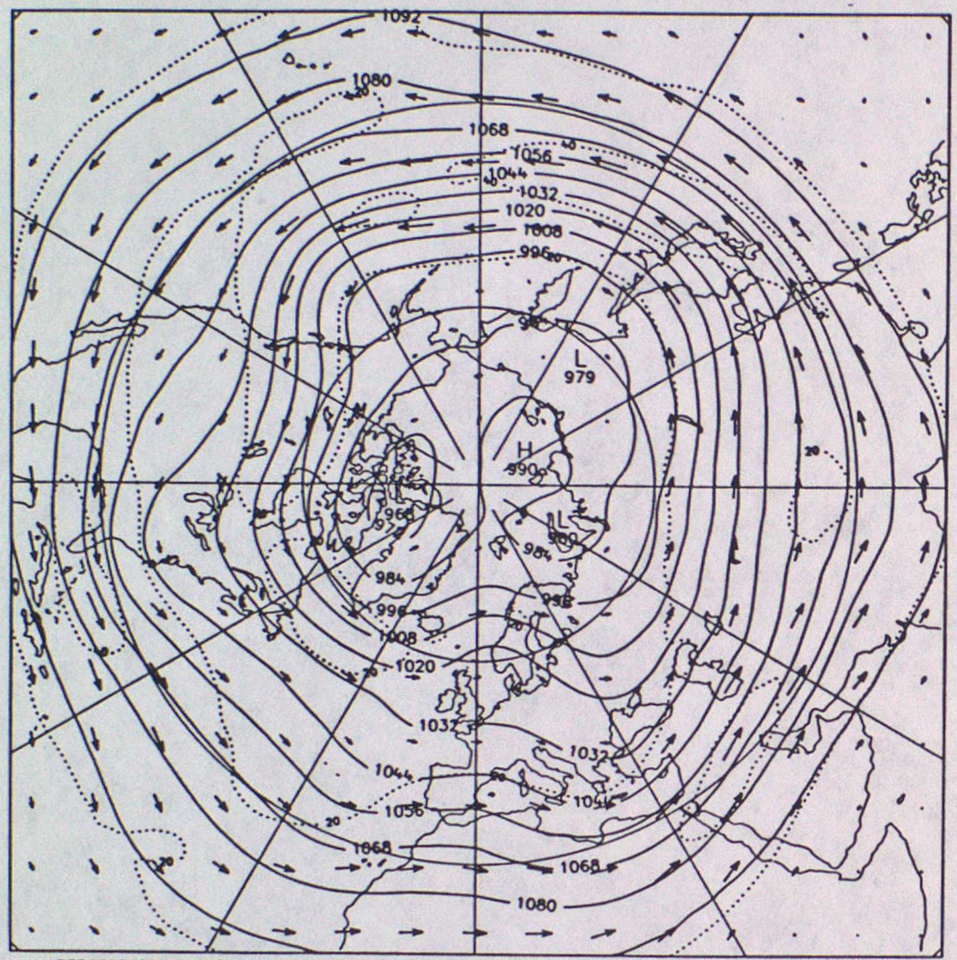

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1068
1080
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40

→ REPRESENTS 40 M/S CONTOUR INTERVAL: 120 M UNITS: 10 M

OPERATIONAL ARCHIVE MEANS. APRIL 1987
HEIGHTS, WIND ARROWS AND ISOTACHS.
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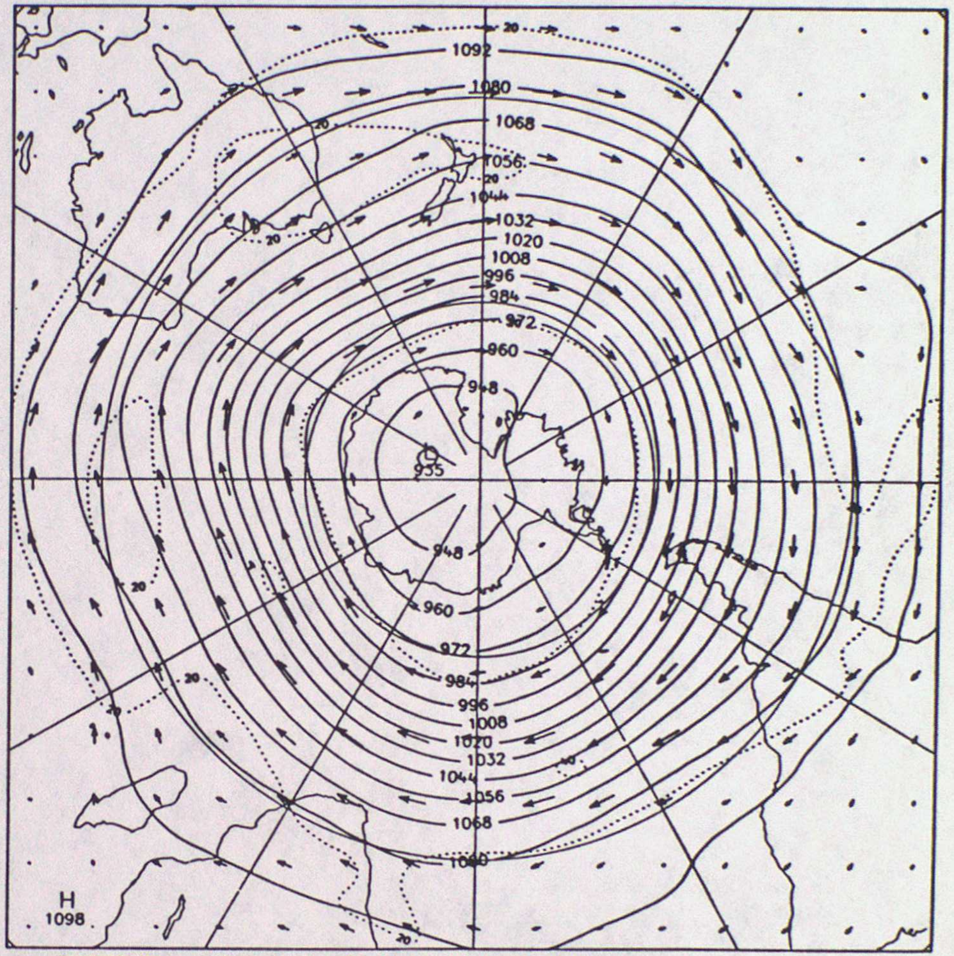

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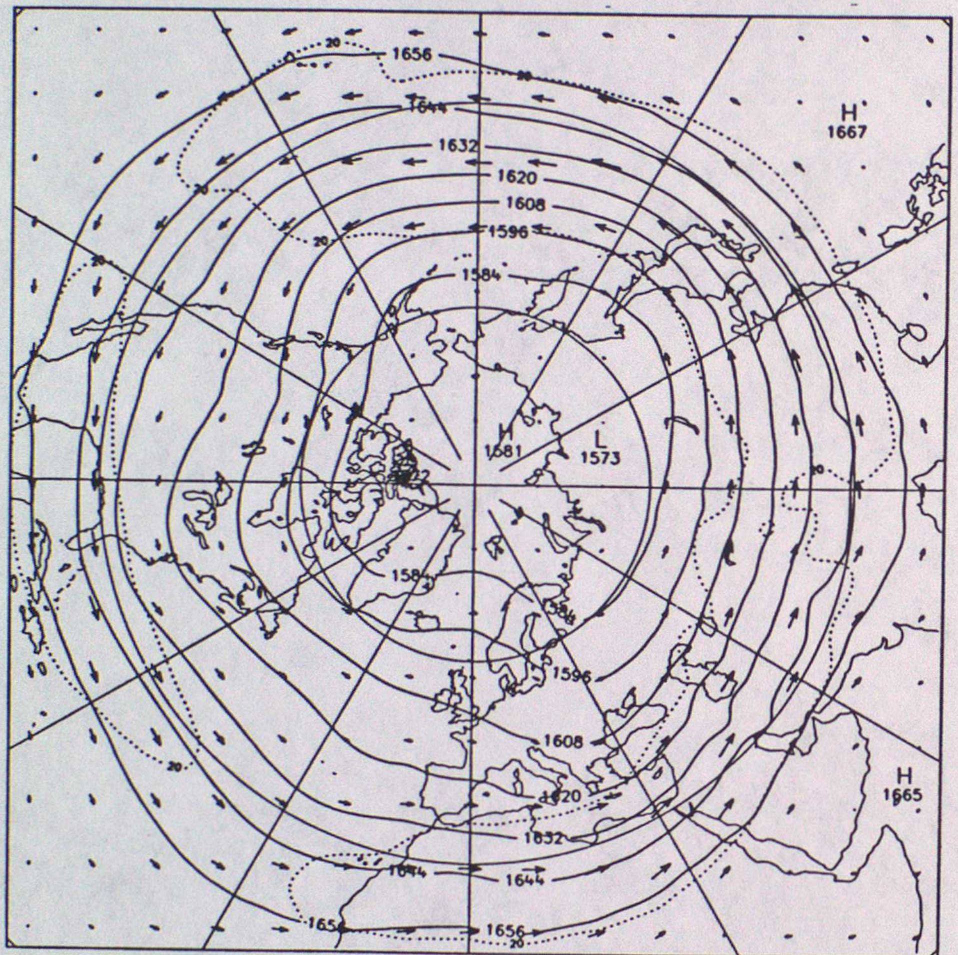
1044
1032
1020
1008
996
984
972
960
948
935
948
960
972
984
996
1008
1020
1032
1044
1056
1068
1080
H
1098
20
40

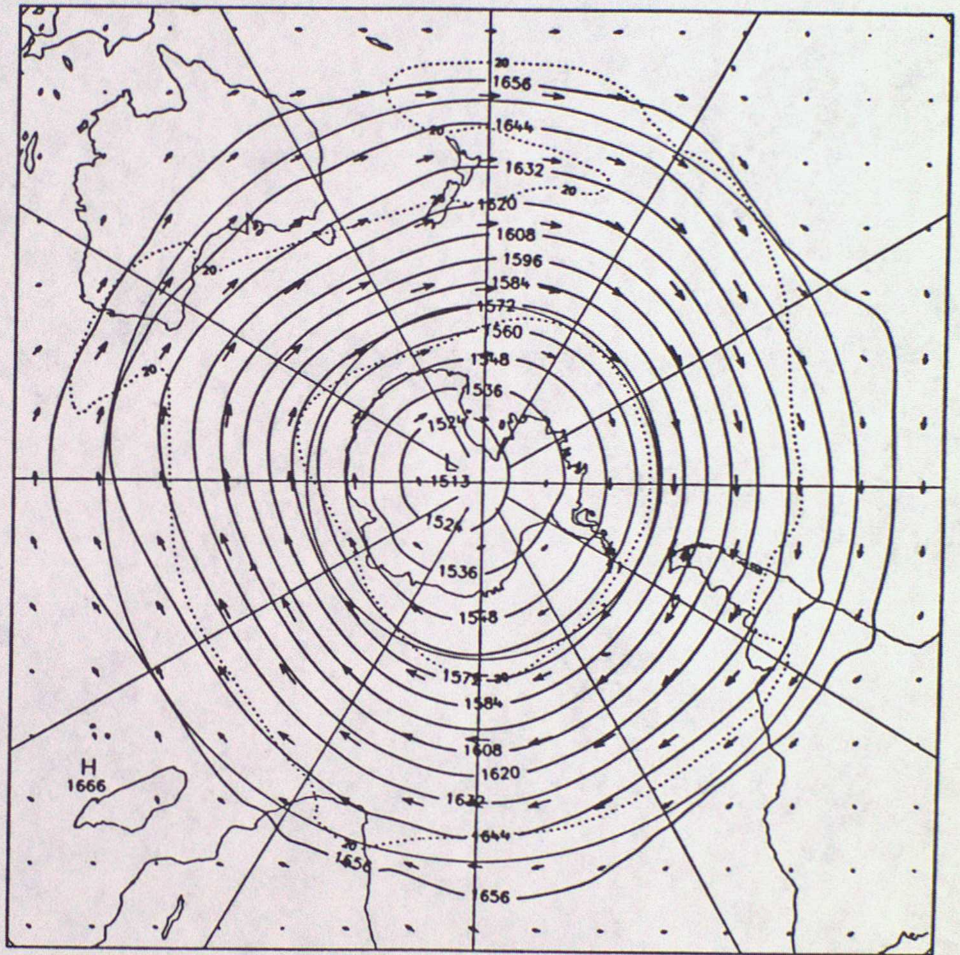
→ REPRESENTS 40 M/S CONTOUR INTERVAL: 120 M UNITS: 10 M

OPERATIONAL ARCHIVE MEANS.   APRIL   1987
HEIGHTS, WIND ARROWS AND ISOTACHS.
VALID AT 0Z ON 1/4/1987 DAY 91 DATA TIME 12Z ON 30/4/1987 DAY 120
LEVEL: 100 MB


H
1667
H
1581
L
1573
H
1665
1656
1644
1632
1620
1608
1596
1584
20

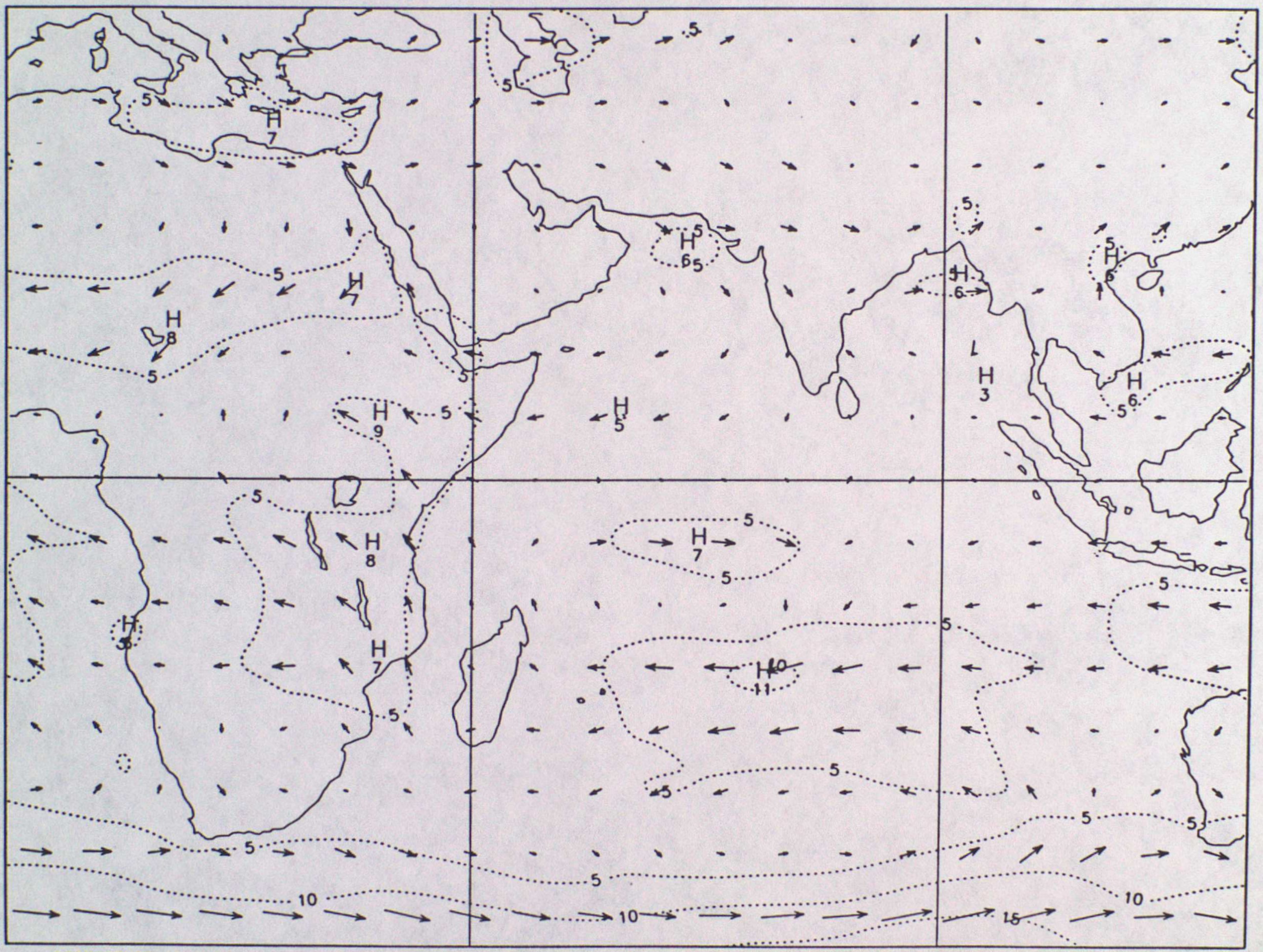
→ REPRESENTS 40 M/S CONTOUR INTERVAL: 120 M UNITS: 10 M

OPERATIONAL ARCHIVE MEANS.   APRIL   1987
HEIGHTS, WIND ARROWS AND ISOTACHS.
VALID AT 0Z ON 1/4/1987 DAY 91 DATA TIME 12Z ON 30/4/1987 DAY 120
LEVEL: 100 MB


L
1513
1524
1536
1548
1560
1572
1584
1596
1608
1620
1632
1644
1656
H
1666
20

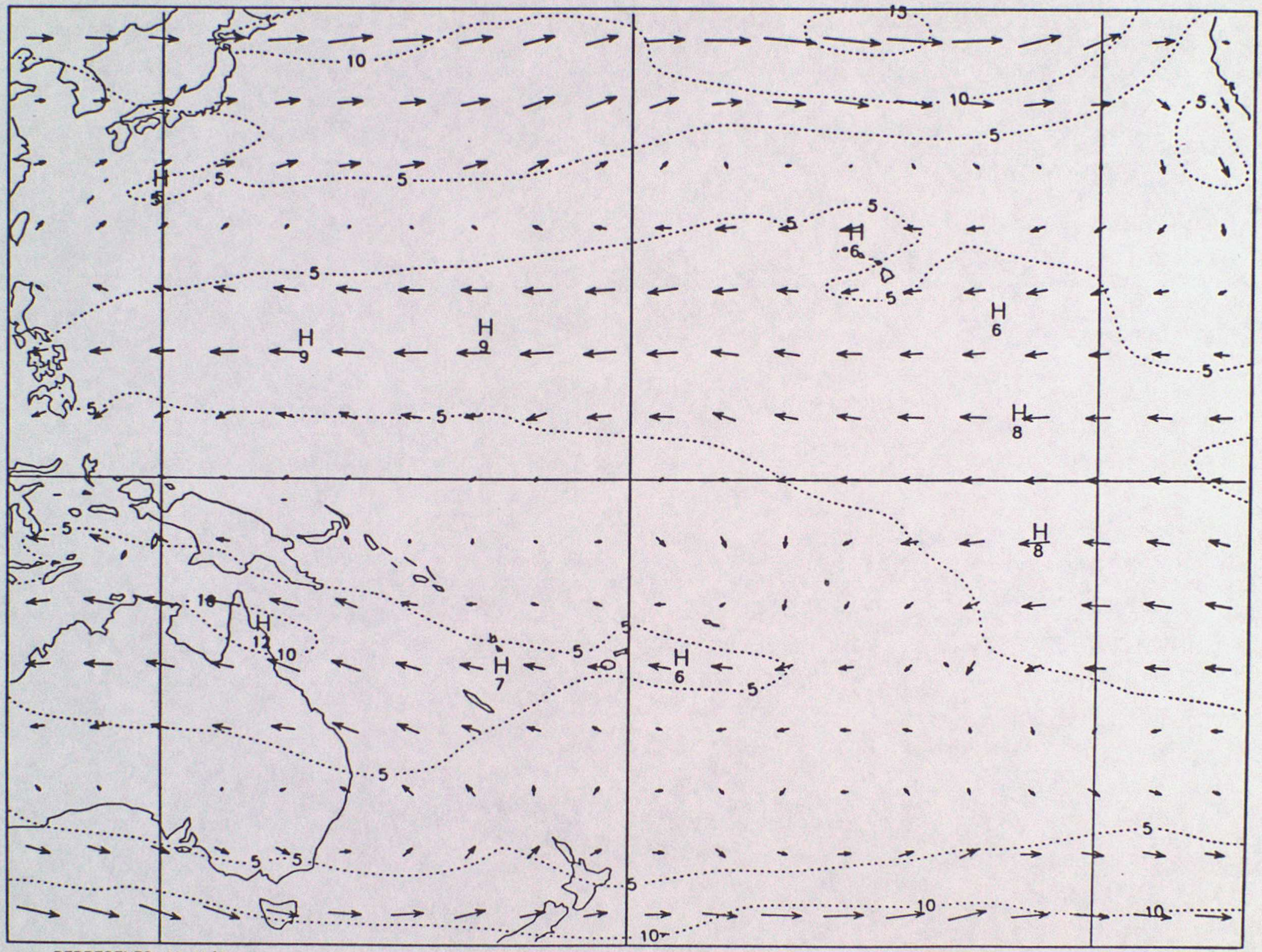
→ REPRESENTS 40 M/S CONTOUR INTERVAL: 120 M UNITS: 10 M

OPERATIONAL ARCHIVE MEANS.   APRIL   1987
WIND ARROWS AND ISOTACHS BETWEEN LATS. 45 N - 45 S.
VALID AT 0Z ON 1/4/1987 DAY 91 DATA TIME 12Z ON 30/4/1987 DAY 120
850 MBS.   BETWEEN LONGS. 0 E - 120 E


5
H
7
5
H
6
5
H
8
H
9
H
3
L
H
10
11
10
15

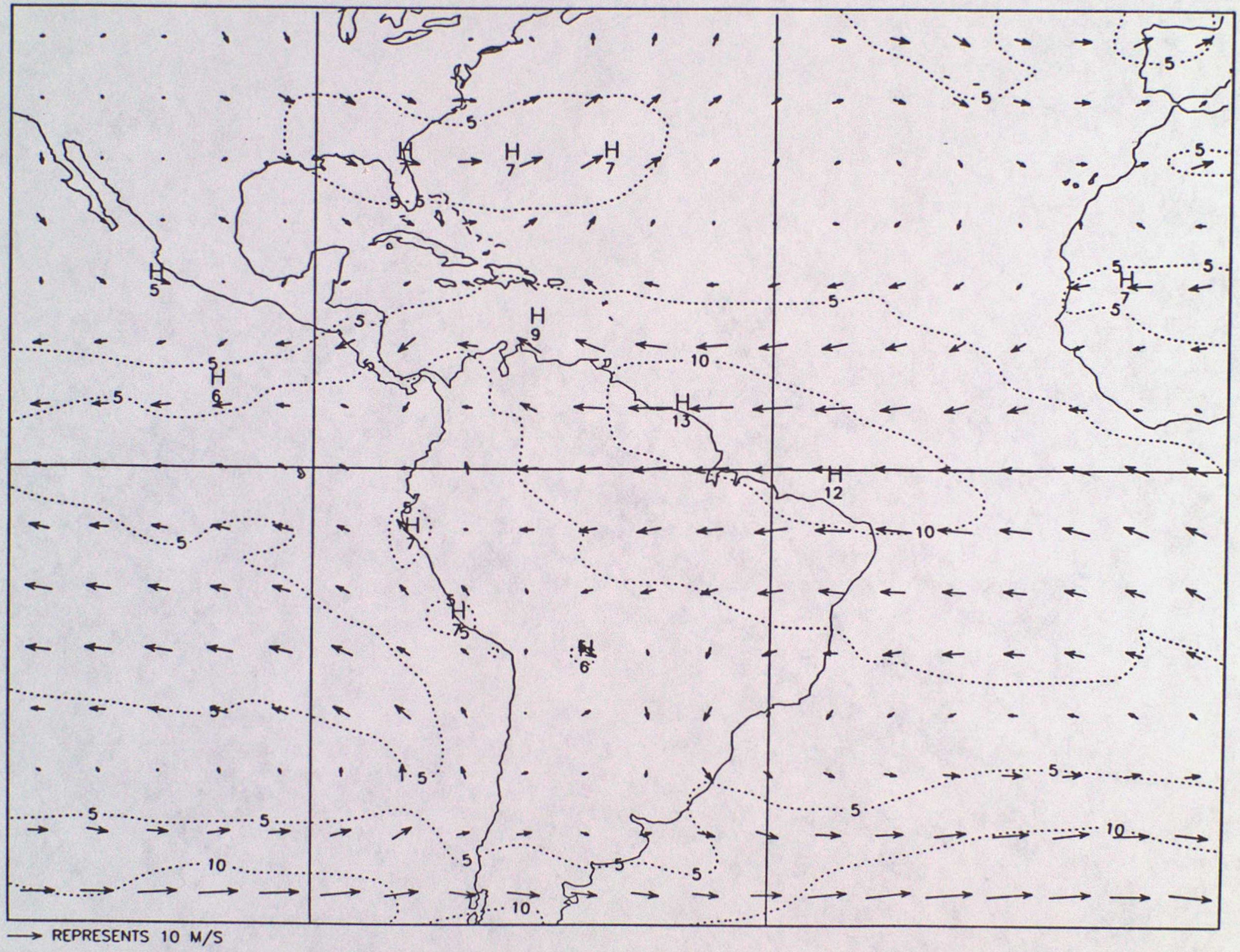
→ REPRESENTS 10 M/S

OPERATIONAL ARCHIVE MEANS.   APRIL   1987
WIND ARROWS AND ISOTACHS BETWEEN LATS. 45 N - 45 S.
VALID AT 0Z ON 1/4/1987 DAY 91 DATA TIME 12Z ON 30/4/1987 DAY 120
850 MBS.   BETWEEN LONGS. 120 E - 120 W

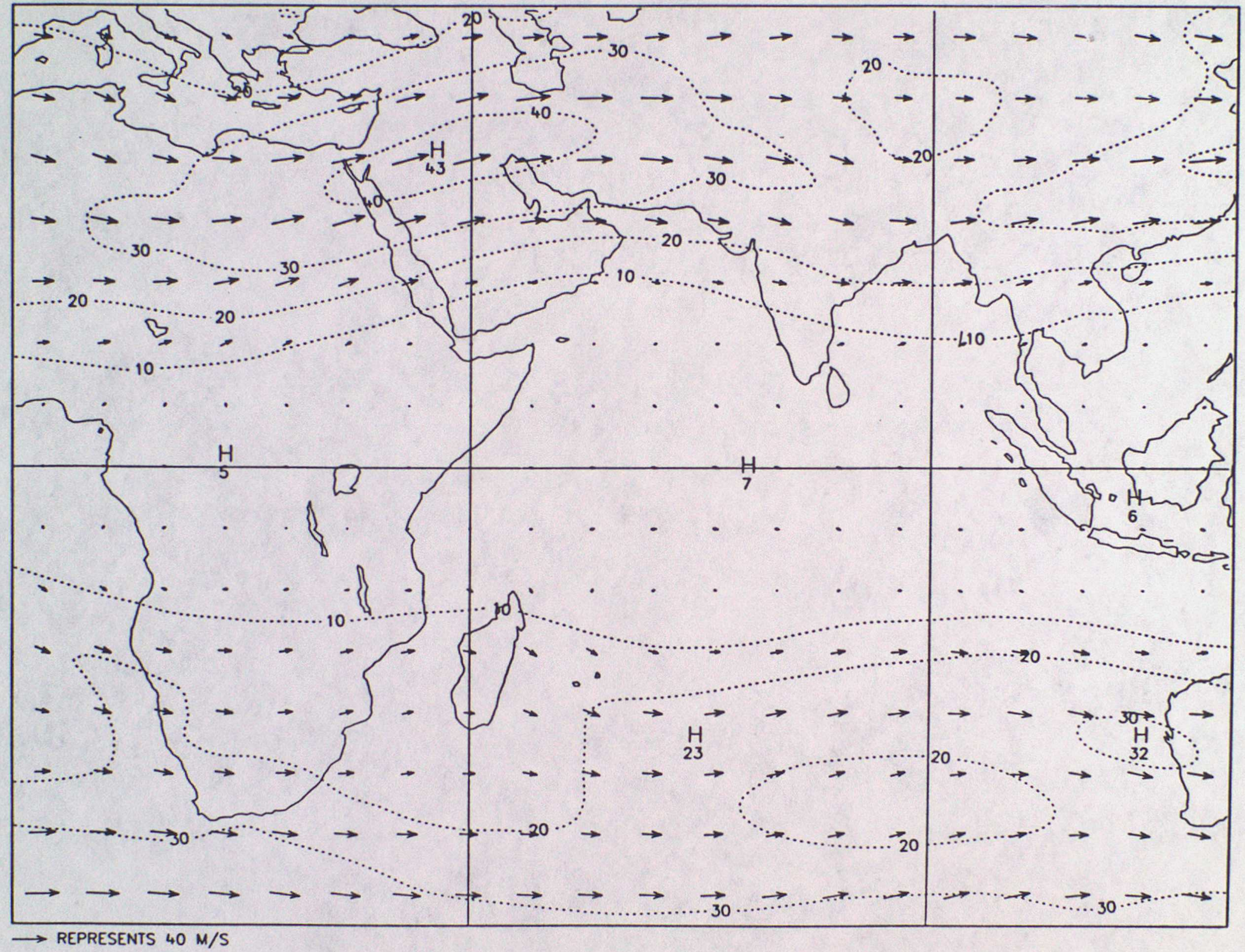


→ REPRESENTS 10 M/S

OPERATIONAL ARCHIVE MEANS. APRIL 1987
WIND ARROWS AND ISOTACHS BETWEEN LATS. 45 N - 45 S.
VALID AT 0Z ON 1/4/1987 DAY 91 DATA TIME 12Z ON 30/4/1987 DAY 120
850 MBS. BETWEEN LONGS. 120 W - 0 W

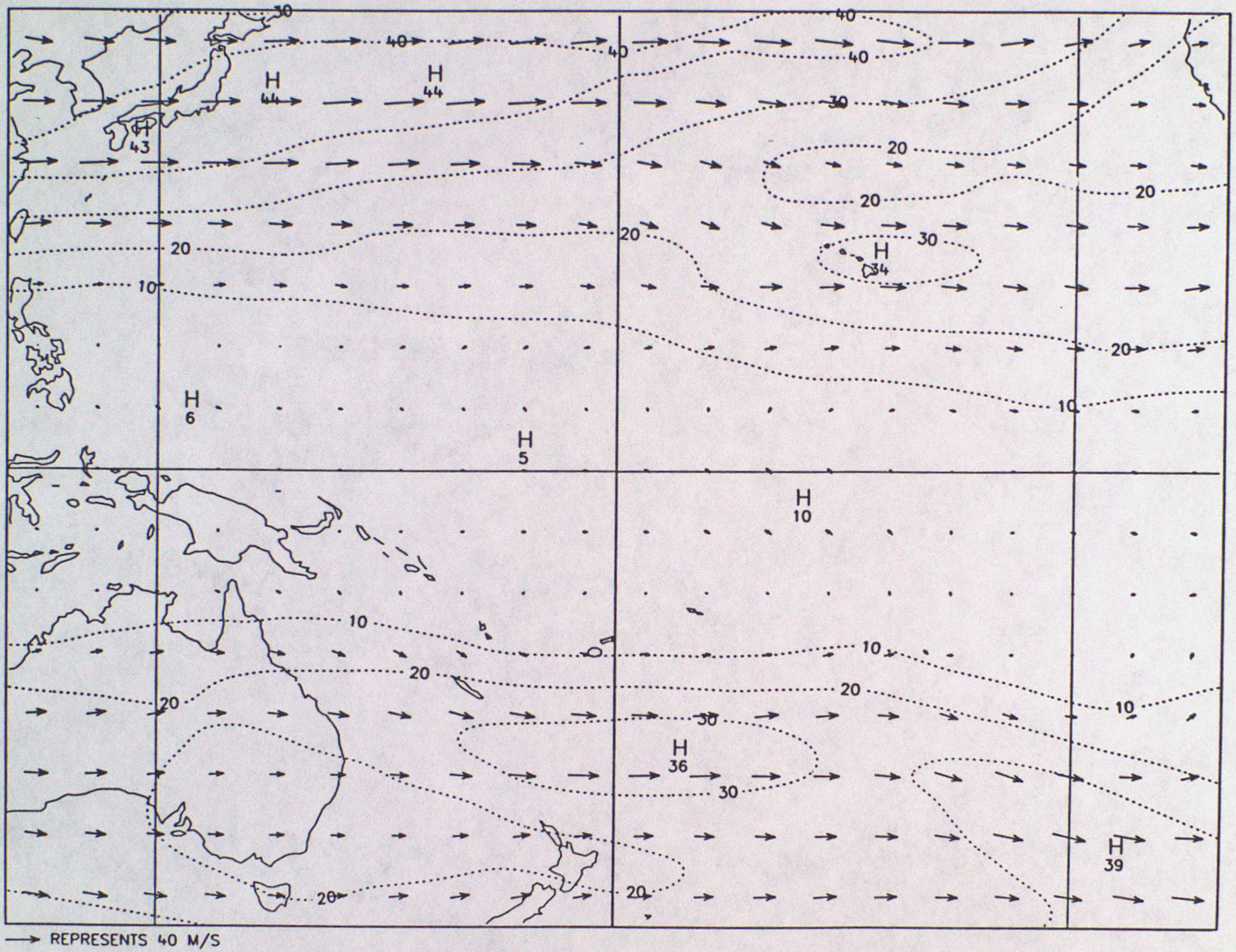

H 5
H 6
H 7
H 9
H 13
H 12
H 7
H 5
H 6
H 7
5
10
→ REPRESENTS 10 M/S

OPERATIONAL ARCHIVE MEANS. APRIL 1987
WIND ARROWS AND ISOTACHS BETWEEN LATS. 45 N - 45 S.
VALID AT 0Z ON 1/4/1987 DAY 91 DATA TIME 12Z ON 30/4/1987 DAY 120
250 MBS. BETWEEN LONGS. 0 E - 120 E



20
30
20
40
H
43
40
30
20
30
30
20
20
10
10
20
L10
H
5
H
7
H
6
10
10
20
30
H
32
H
23
20
20
30
20
30
30
→ REPRESENTS 40 M/S

OPERATIONAL ARCHIVE MEANS.   APRIL   1987
WIND ARROWS AND ISOTACHS   BETWEEN LATS. 45 N - 45 S.
VALID AT 0Z ON 1/4/1987 DAY 91   DATA TIME 12Z ON 30/4/1987 DAY 120
250 MBS.   BETWEEN LONGS. 120 E - 120 W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43
30
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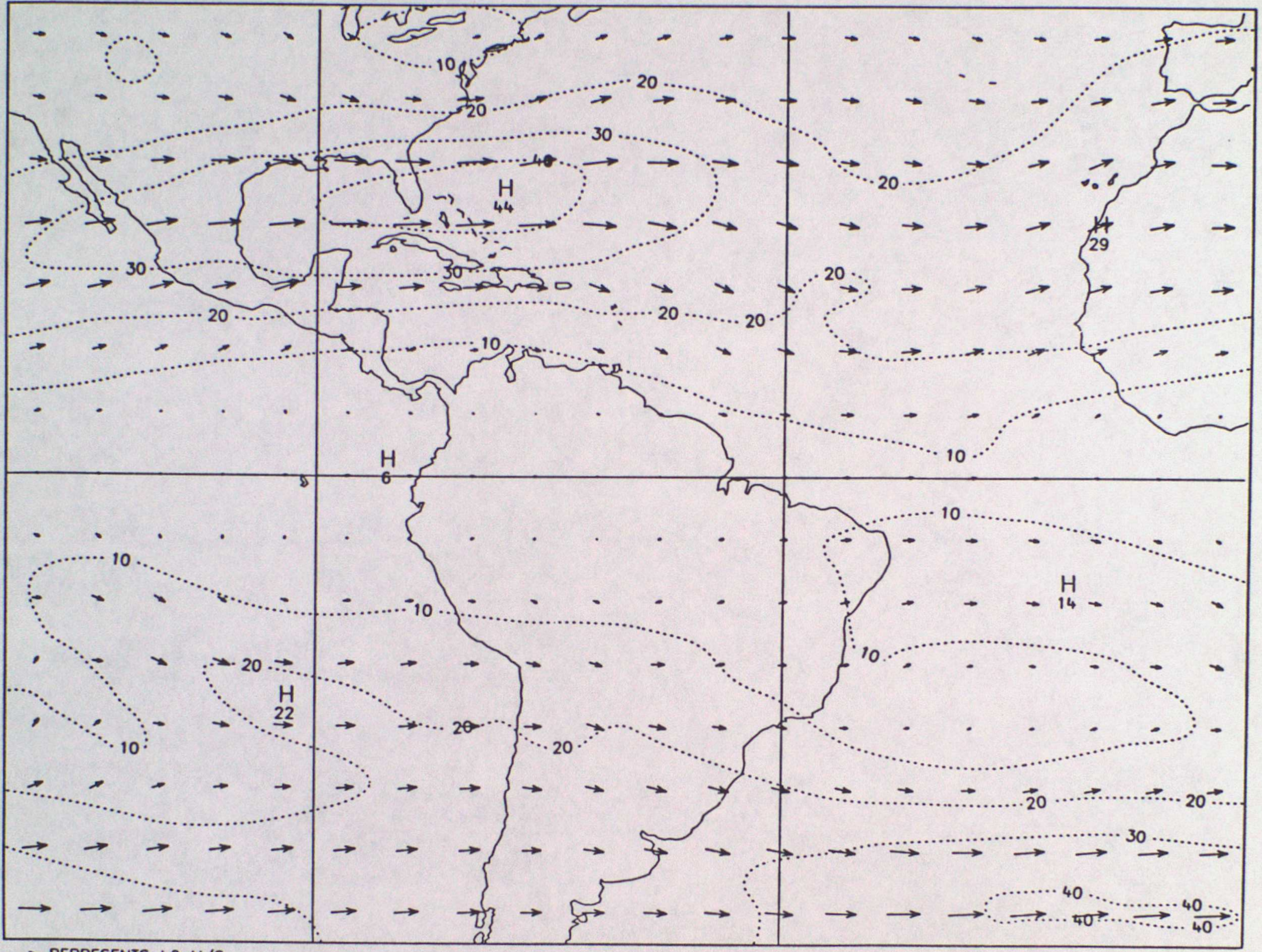
6
10
H
5
H
10
10
10
20
20
20
10
30
H
36
30
H
39
20
20
→ REPRESENTS 40 M/S

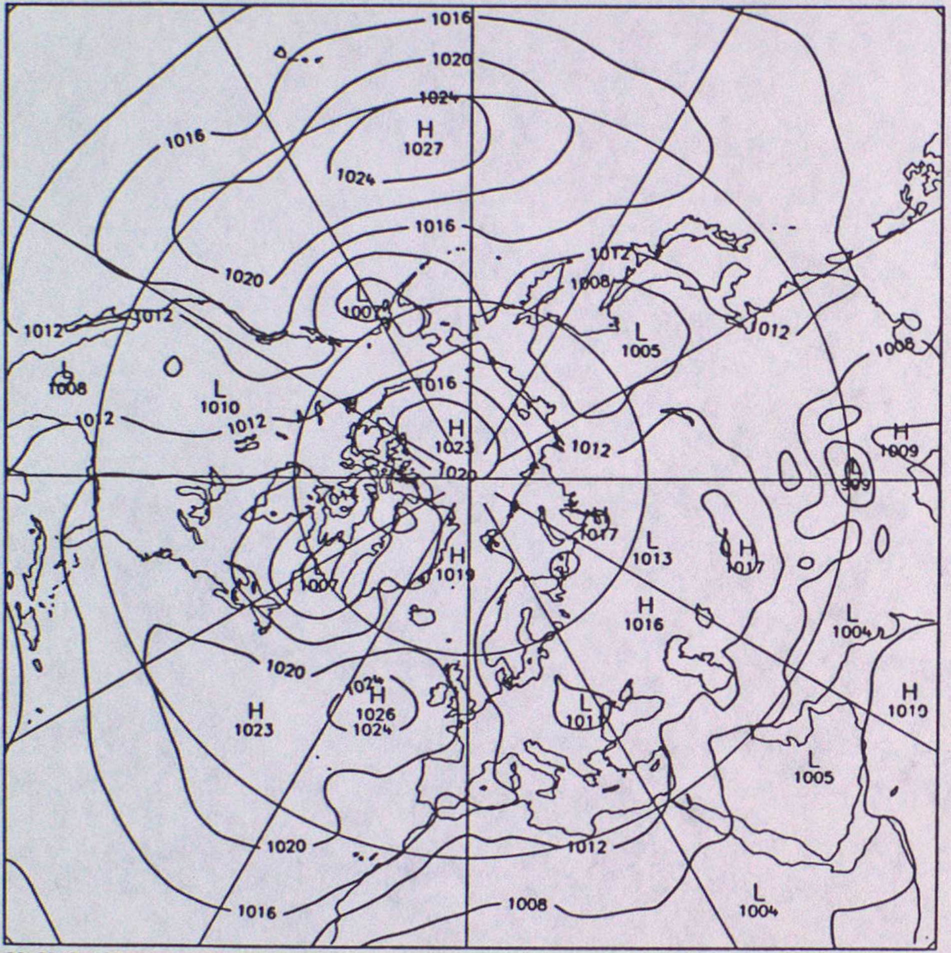
OPERATIONAL ARCHIVE MEANS.   APRIL   1987
WIND ARROWS AND ISOTACHS   BETWEEN LATS. 45 N - 45 S.
VALID AT   0Z ON 1/4/1987 DAY 91   DATA TIME 12Z ON 30/4/1987 DAY 120
250 MBS.   BETWEEN LONGS. 120 W - 0 W


10
20
30
40
H
44
H
29
H
6
H
14
H
22

→ REPRESENTS 40 M/S

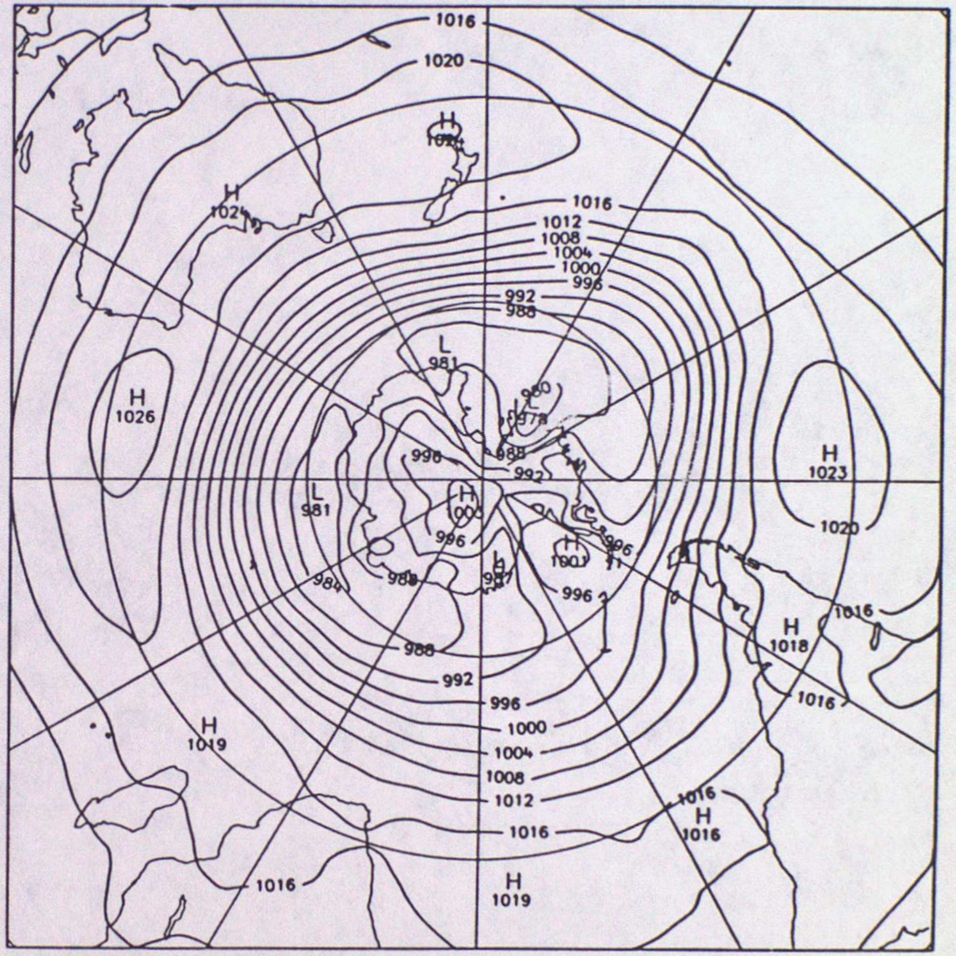
MAY
1987

OPERATIONAL ARCHIVE MEANS. MAY 1987
PMSL
VALID AT 0Z ON 1/5/1987 DAY 121 DATA TIME 12Z ON 31/5/1987 DAY 151
SEA LEVEL


1016
1020
1024
H 1027
1024
1016
1016
1020
L 1007
1012
1012
1012
L 1008
L 1010
1012
1016
H 1023
1020
1012
1008
L 1005
1012
1008
H 1009
L 999
H 1017
L 1013
H 1017
H 1019
L 1007
H 1016
L 1004
1020
H 1026
1024
H 1023
L 1011
H 1019
L 1005
1020
1012
1016
1008
L 1004

CONTOUR INTERVAL: 4 MB UNITS: MB

OPERATIONAL ARCHIVE MEANS. MAY 1987
PMSL
VALID AT 0Z ON 1/5/1987 DAY 121 DATA TIME 12Z ON 31/5/1987 DAY 151
SEA LEVEL


1016
1020
H 1024
H 1024
1016
1012
1008
1004
1000
996
992
988
L 981
980
L 978
988
992
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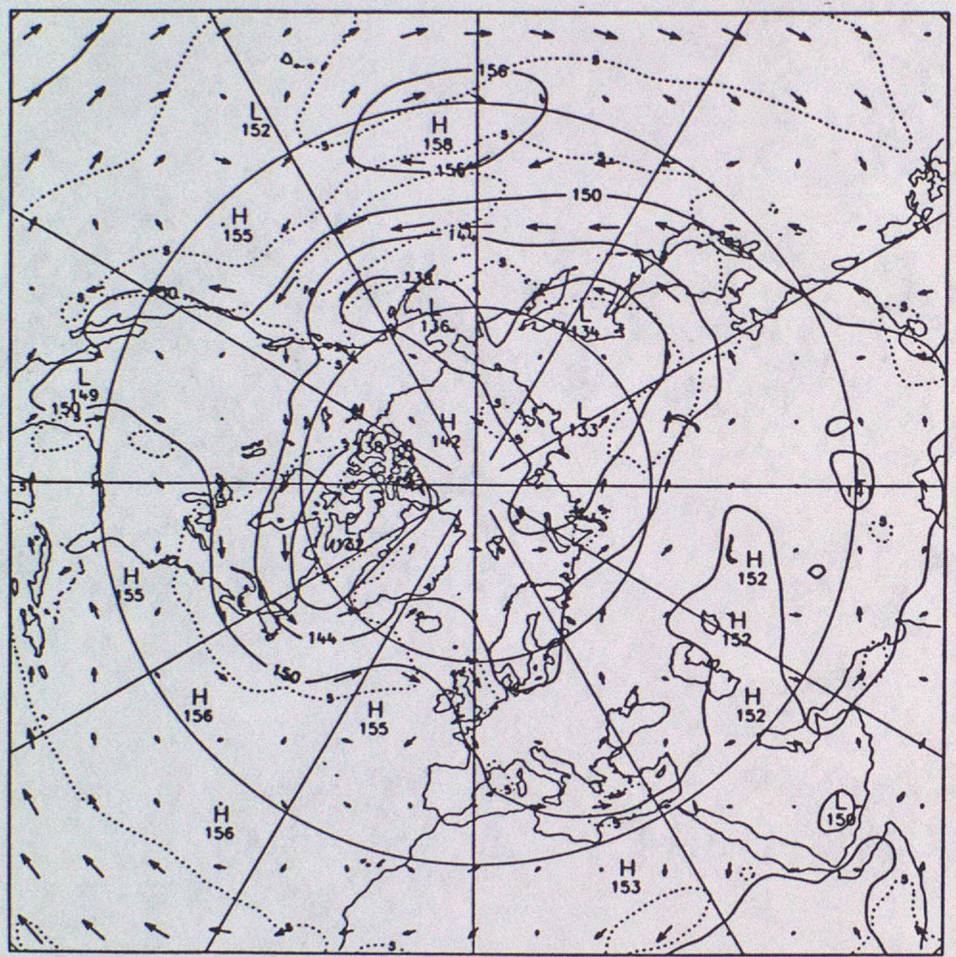
H 1026
L 981
H 1005
996
L 987
H 1001
996
996
984
988
988
992
996
1000
1004
1008
1012
1016
H 1023
1020
H 1018
1016
1016
H 1019
1016
H 1016
1016
H 1019

CONTOUR INTERVAL: 4 MB UNITS: MB

OPERATIONAL ARCHIVE MEANS. MAY 1987
HEIGHTS, WIND ARROWS AND ISOTACHS.
VALID AT 0Z ON 1/5/1987 DAY 121 DATA TIME 12Z ON 31/5/1987 DAY 151
LEVEL: 850 MB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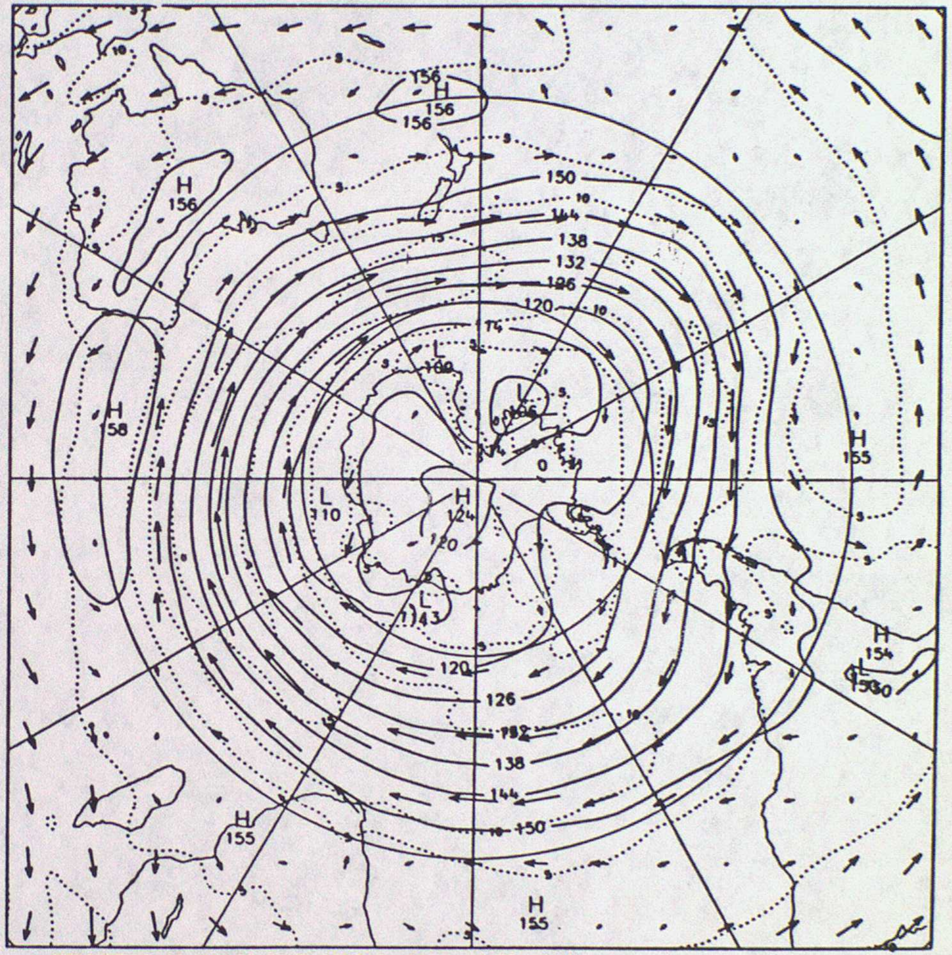
L 136
L 134
H 142
L 133
L 149
150
H 155
144
150
H 152
H 152
H 152
H 156
H 155
H 156
H 153
L 150

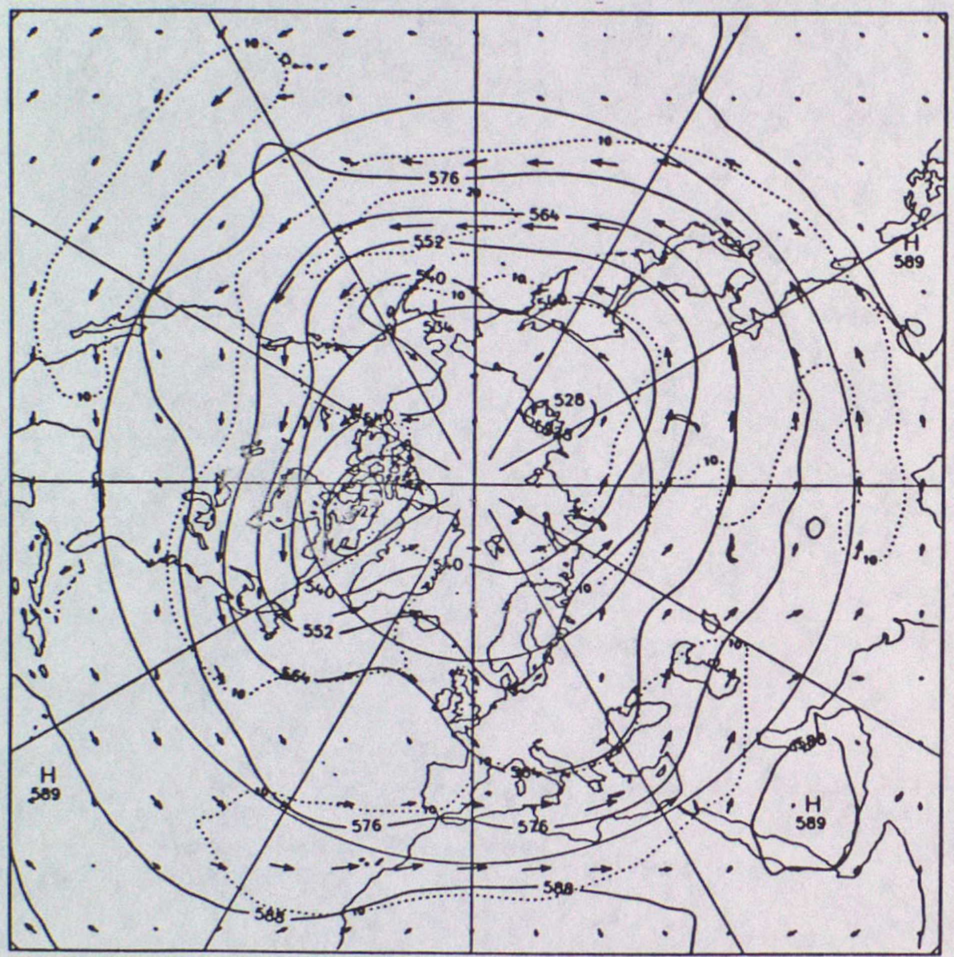
→ REPRESENTS 10 M/S CONTOUR INTERVAL: 60 M UNITS: 10 M

OPERATIONAL ARCHIVE MEANS. MAY 1987
HEIGHTS, WIND ARROWS AND ISOTACHS.
VALID AT 0Z ON 1/5/1987 DAY 121 DATA TIME 12Z ON 31/5/1987 DAY 151
LEVEL: 850 MB


H 156
156
H 156
150
144
138
132
126
120
L 109
H 58
L 110
H 124
120
L 143
H 155
H 154
120
126
132
138
144
150
H 155
H 155

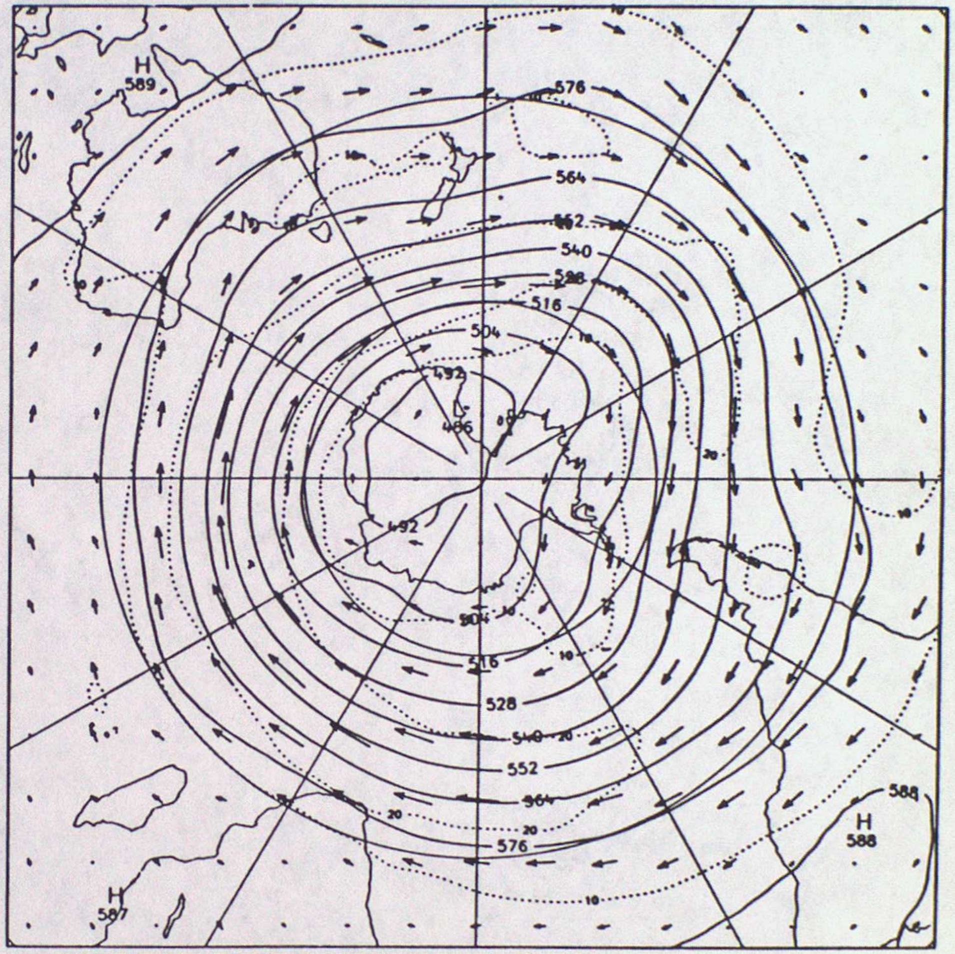
→ REPRESENTS 10 M/S CONTOUR INTERVAL: 60 M UNITS: 10 M

OPERATIONAL ARCHIVE MEANS. MAY 1987
HEIGHTS, WIND ARROWS AND ISOTACHS.
VALID AT 0Z ON 1/5/1987 DAY 121 DATA TIME 12Z ON 31/5/1987 DAY 151
LEVEL: 500 MB


576
564
552
540
528
504
10
20
H
589
588
576
564
552
540
H
589
588
576

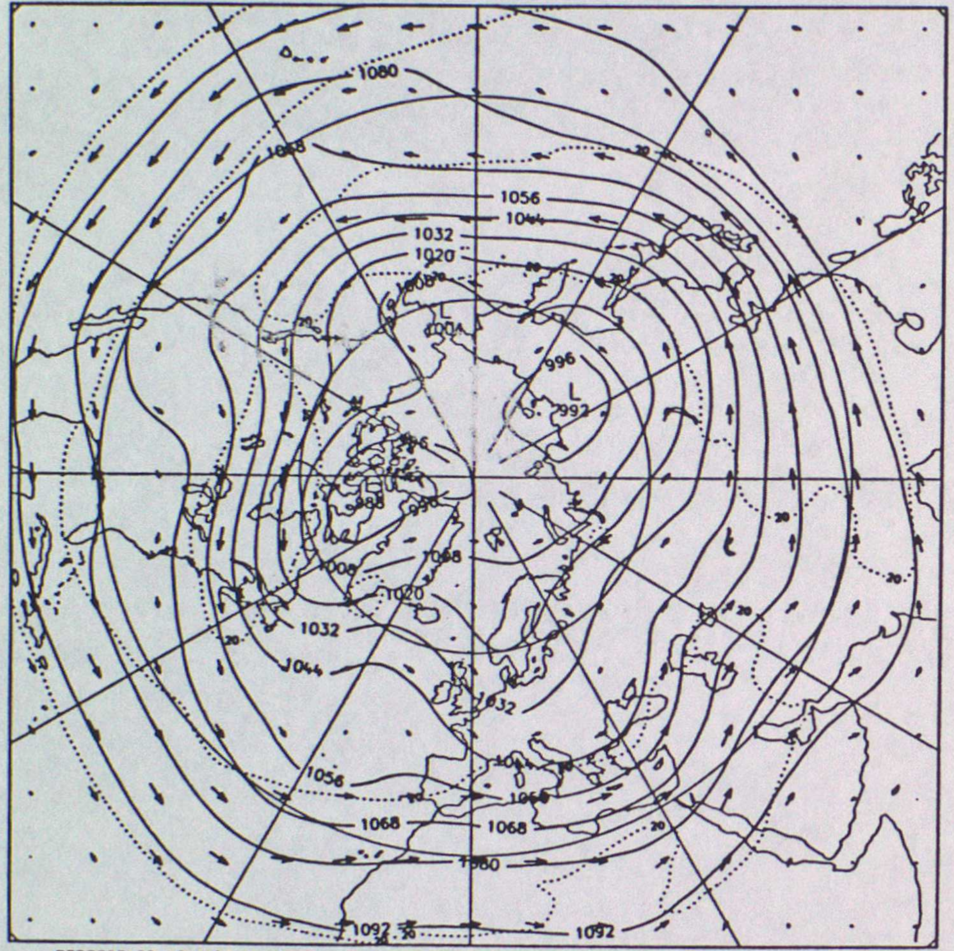
→ REPRESENTS 20 M/S CONTOUR INTERVAL: 120 M UNITS: 10 M

OPERATIONAL ARCHIVE MEANS. MAY 1987
HEIGHTS, WIND ARROWS AND ISOTACHS.
VALID AT 0Z ON 1/5/1987 DAY 121 DATA TIME 12Z ON 31/5/1987 DAY 151
LEVEL: 500 MB


H
589
576
564
552
540
528
516
504
492
486
492
504
516
528
540
552
564
576
10
20
H
588
588
H
587

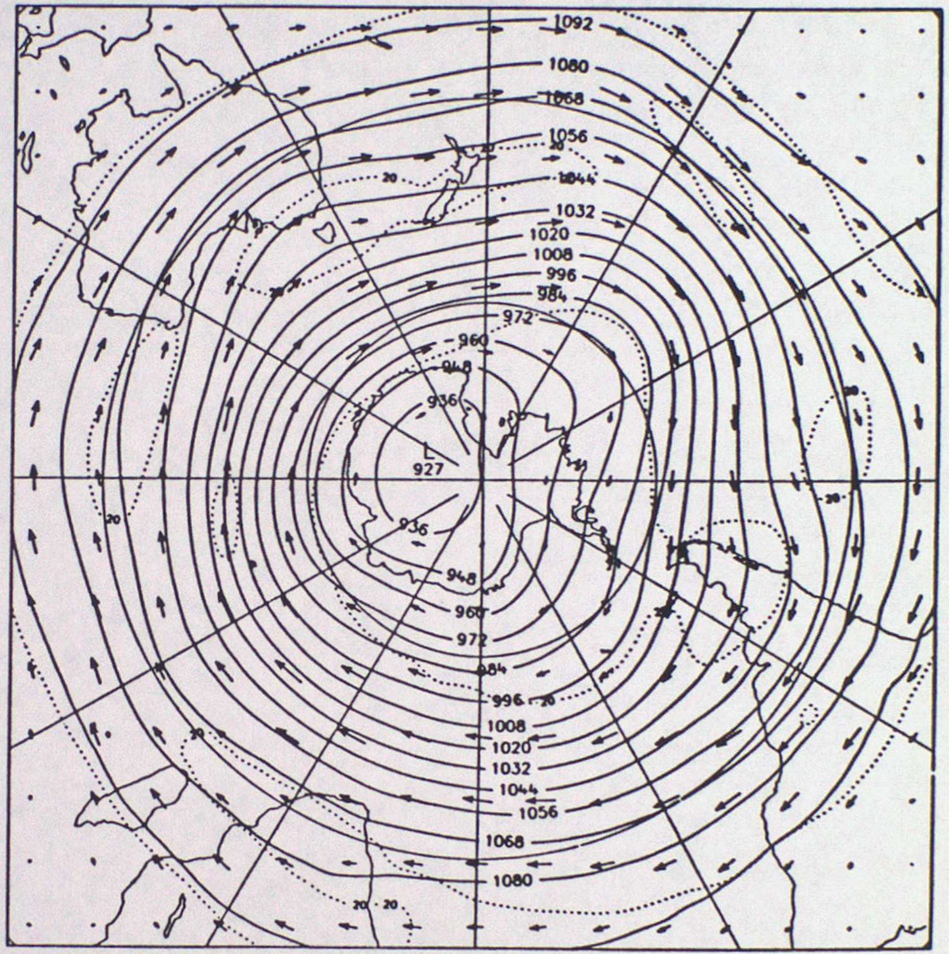
→ REPRESENTS 20 M/S CONTOUR INTERVAL: 120 M UNITS: 10 M

OPERATIONAL ARCHIVE MEANS. MAY 1987
HEIGHTS, WIND ARROWS AND ISOTACHS.
VALID AT 0Z ON 1/5/1987 DAY 121 DATA TIME 12Z ON 31/5/1987 DAY 151
LEVEL: 250 MB


1080
1068
1056
1044
1032
1020
1008
1004
996
L
992
988
936
1068
1008
1020
1032
1044
1032
1056
1068
1068
1080
1092
1092
20

→ REPRESENTS 40 M/S CONTOUR INTERVAL: 120 M UNITS: 10 M

OPERATIONAL ARCHIVE MEANS. MAY 1987
HEIGHTS, WIND ARROWS AND ISOTACHS.
VALID AT 0Z ON 1/5/1987 DAY 121 DATA TIME 12Z ON 31/5/1987 DAY 151
LEVEL: 250 MB


1092
1080
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972
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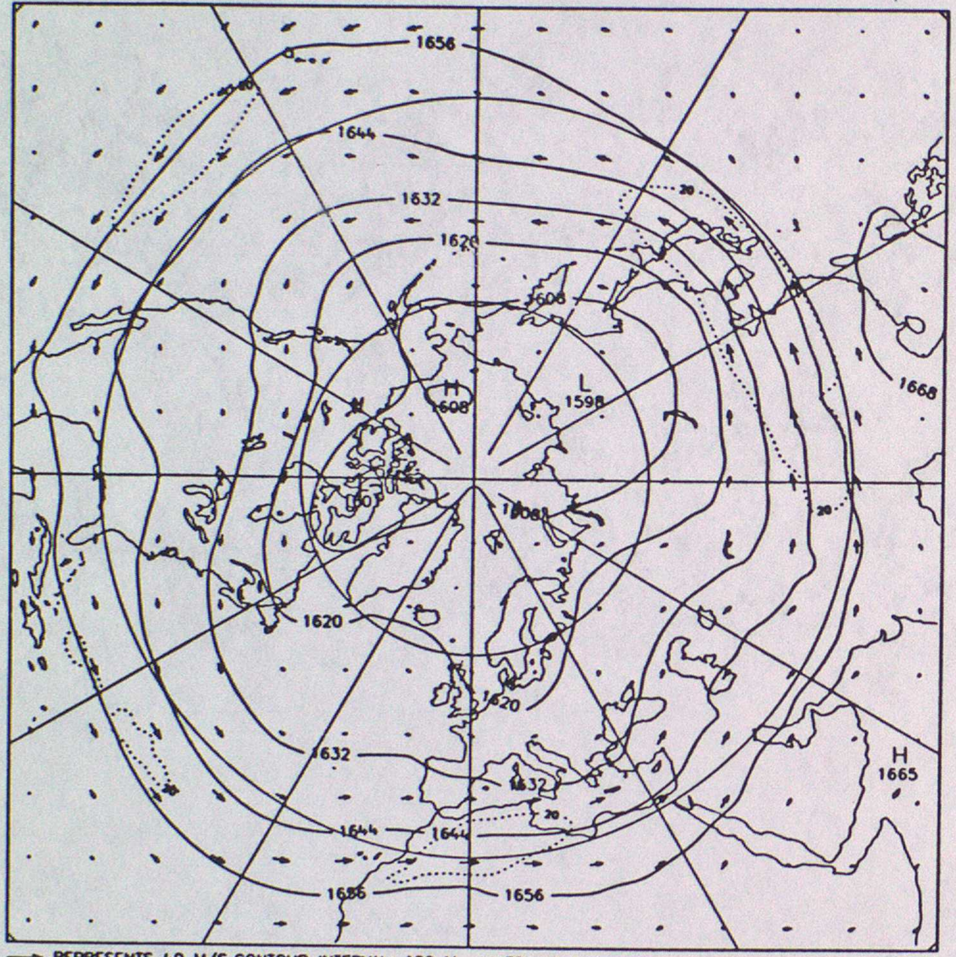
936
L
927
936
948
960
972
984
996
1008
1020
1032
1044
1056
1068
1080
20

→ REPRESENTS 40 M/S CONTOUR INTERVAL: 120 M UNITS: 10 M

OPERATIONAL ARCHIVE MEANS.   MAY   1987
HEIGHTS, WIND ARROWS AND ISOTACHS.
VALID AT   0Z ON 1/5/1987 DAY 121   DATA TIME 12Z ON 31/5/1987 DAY 151
LEVEL: 100 MB


1656
1644
1632
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H
1608
L
1598
1608
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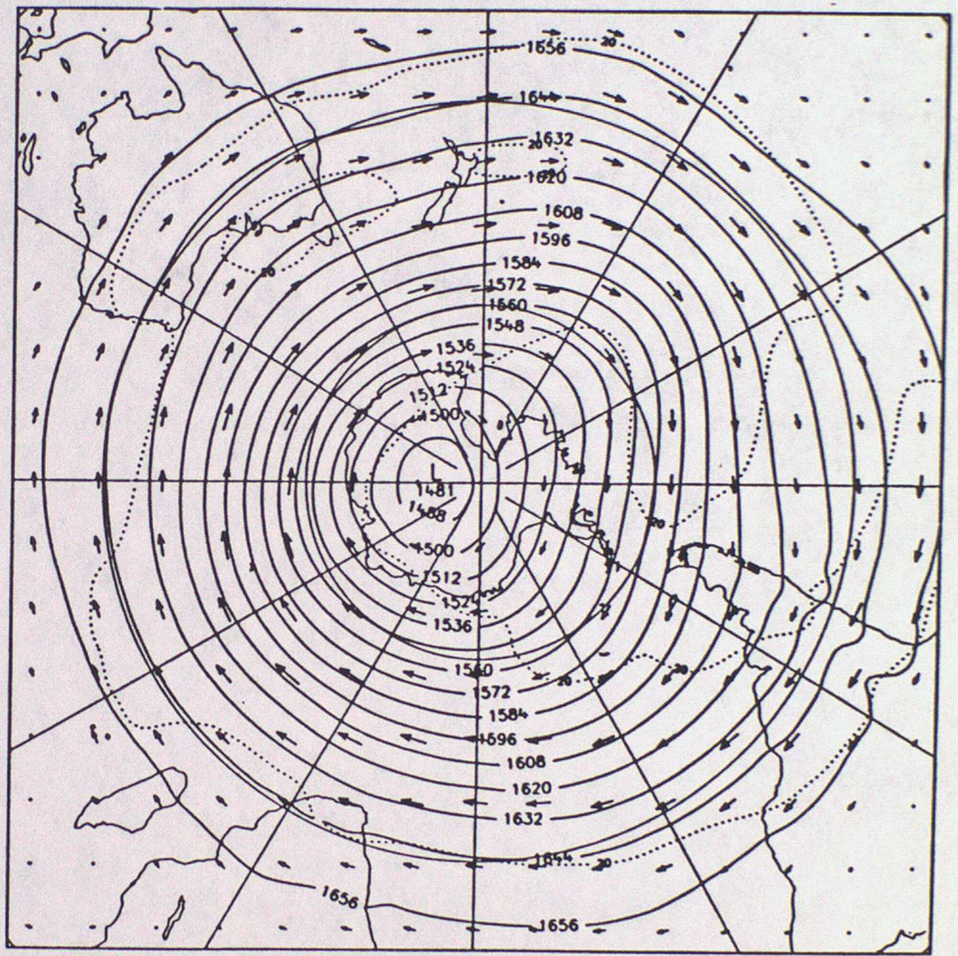
1620
1632
1632
1644
1644
1656
1656
1668
H
1665
20
20

→ REPRESENTS 40 M/S CONTOUR INTERVAL: 120 M   UNITS: 10 M

OPERATIONAL ARCHIVE MEANS.   MAY   1987
HEIGHTS, WIND ARROWS AND ISOTACHS.
VALID AT   0Z ON 1/5/1987 DAY 121   DATA TIME 12Z ON 31/5/1987 DAY 151
LEVEL: 100 MB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1548
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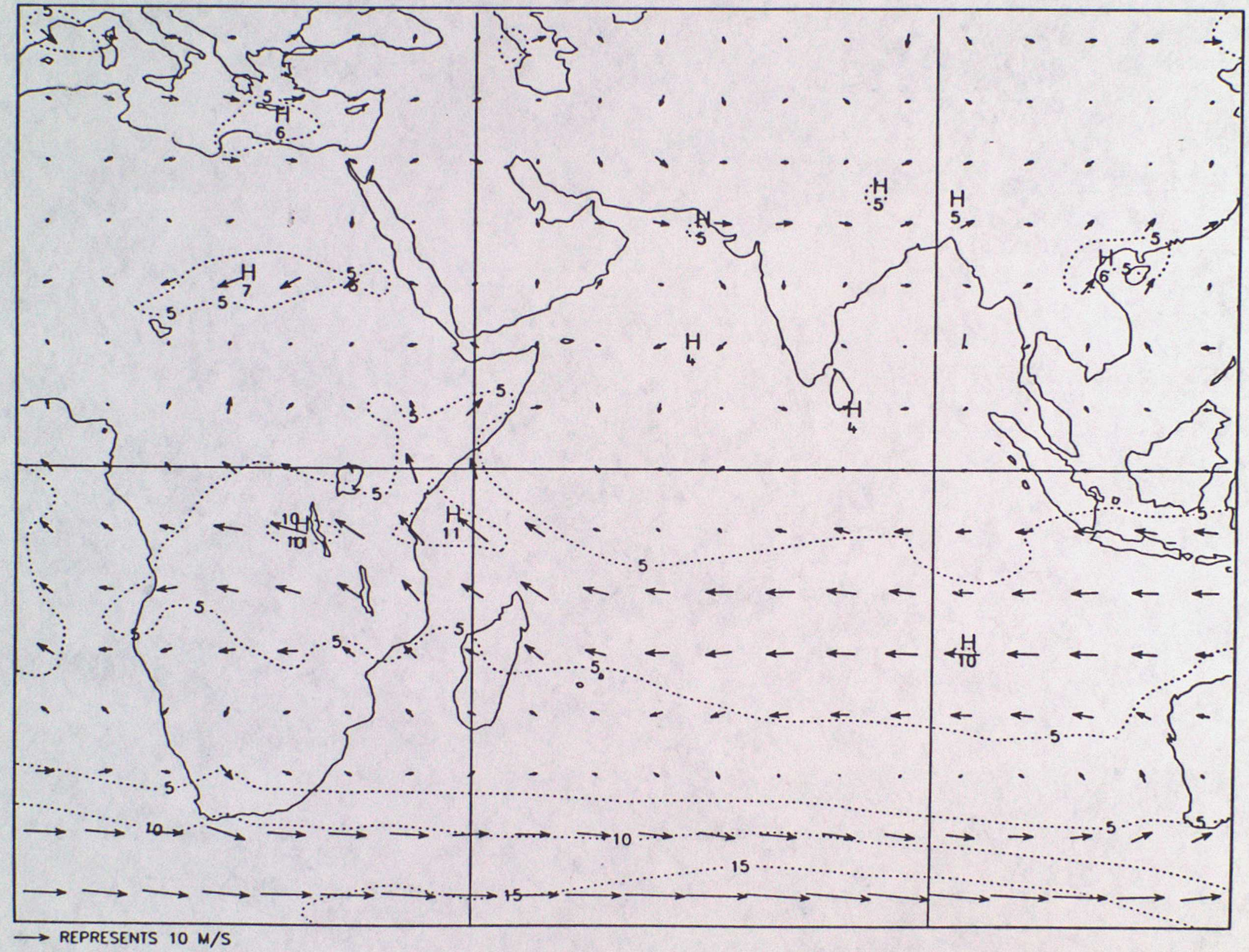
L
1481
1488
1500
1512
1524
1536
1560
1572
1584
1596
1608
1620
1632
1644
1656
1656
20

→ REPRESENTS 40 M/S CONTOUR INTERVAL: 120 M   UNITS: 10 M

OPERATIONAL ARCHIVE MEANS.   MAY   1987
WIND ARROWS AND ISOTACHS BETWEEN LATS. 45 N - 45 S.
VALID AT 0Z ON 1/5/1987 DAY 121 DATA TIME 12Z ON 31/5/1987 DAY 151
850 MBS.   BETWEEN LONGS. 0 E - 120 E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H
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5
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H
5
H
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6
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H
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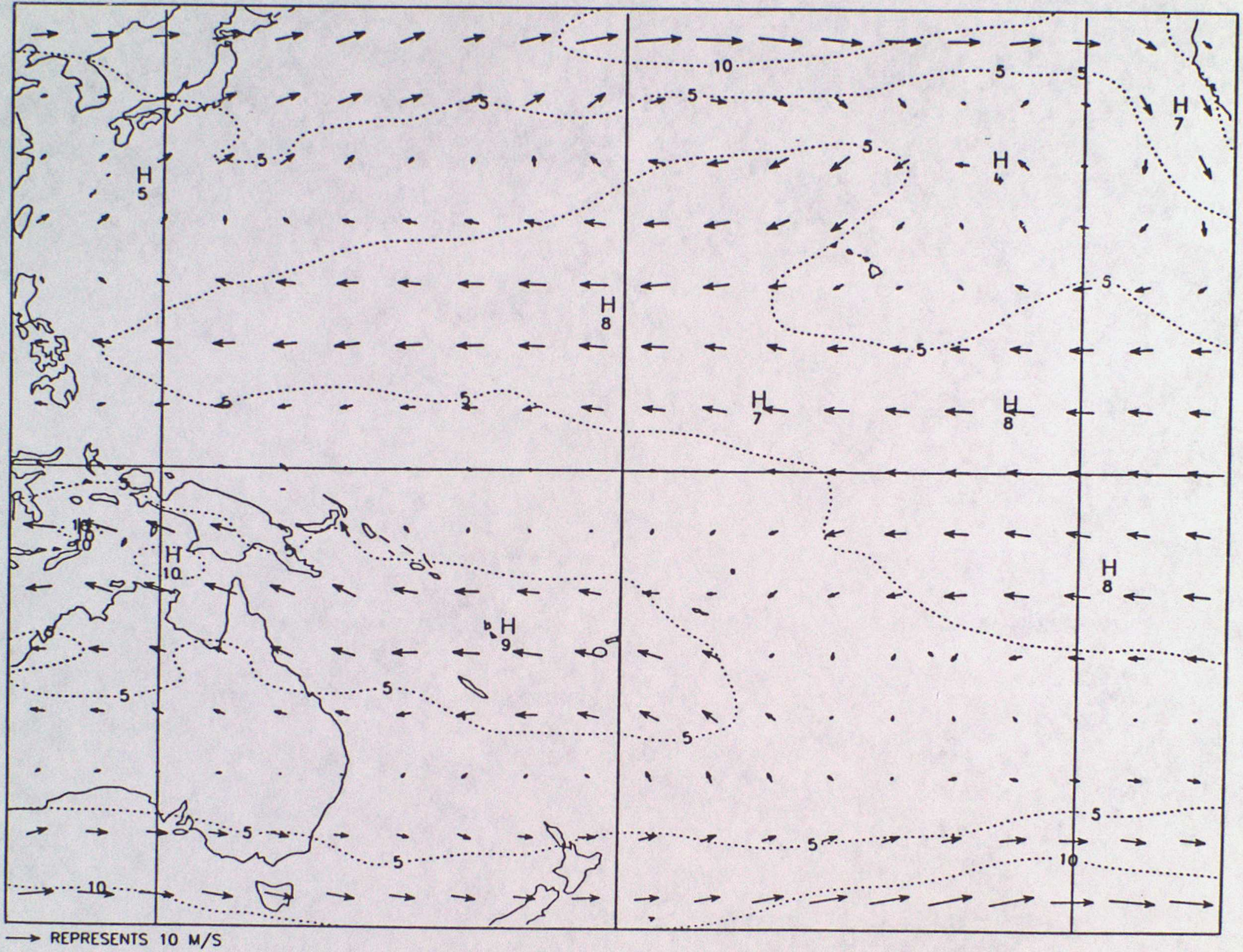
4
5
5
5
10
10
H
11
5
5
5
5
5
H
10
5
5
5
10
10
5
5
15
15
→ REPRESENTS 10 M/S

OPERATIONAL ARCHIVE MEANS.   MAY   1987
WIND ARROWS AND ISOTACHS   BETWEEN LATS. 45 N - 45 S.
VALID AT 0Z ON 1/5/1987 DAY 121 DATA TIME 12Z ON 31/5/1987 DAY 151
850 MBS.   BETWEEN LONGS. 120 E - 120 W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H
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4
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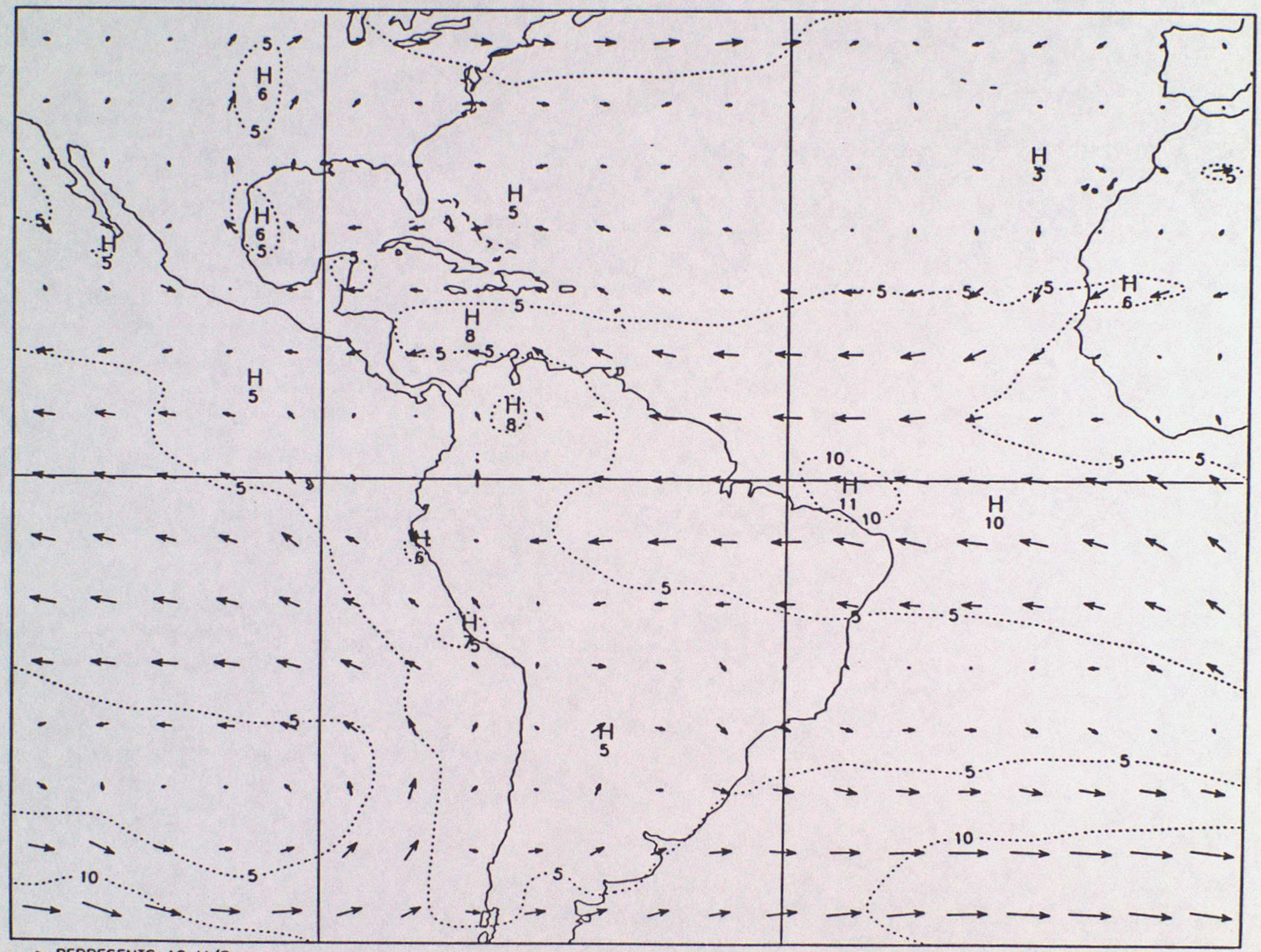
5
H
8
H
7
H
8
H
10
H
9
H
8
10
→ REPRESENTS 10 M/S

OPERATIONAL ARCHIVE MEANS.   MAY   1987
WIND ARROWS AND ISOTACHS   BETWEEN LATS. 45 N - 45 S.
VALID AT 0Z ON 1/5/1987 DAY 121 DATA TIME 12Z ON 31/5/1987 DAY 151
850 MBS.   BETWEEN LONGS. 120 W - 0 W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8
H
8
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3
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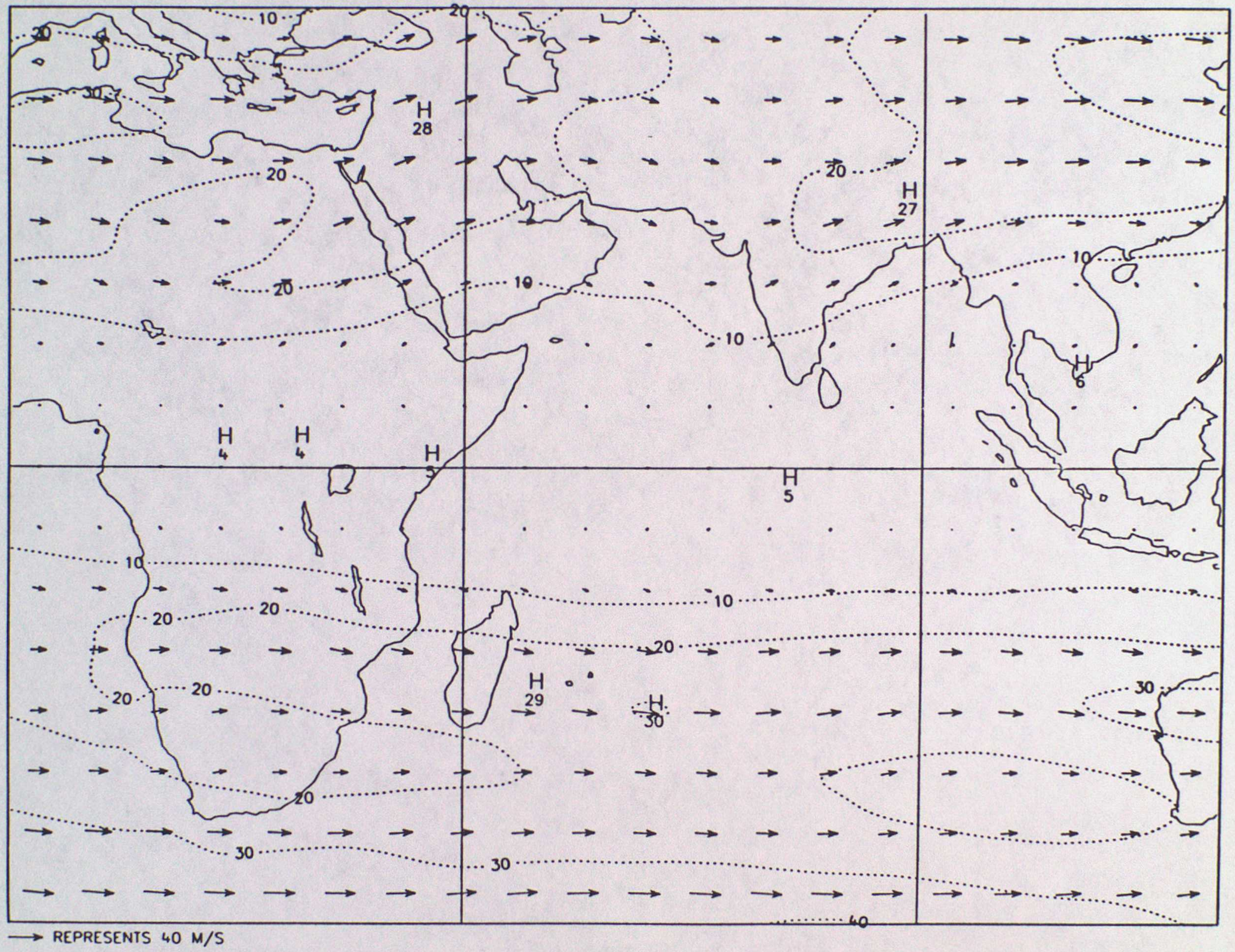
H
11
H
10
H
6
H
5
H
5
10
5

→ REPRESENTS 10 M/S

OPERATIONAL ARCHIVE MEANS.   MAY   1987
WIND ARROWS AND ISOTACHS BETWEEN LATS. 45 N - 45 S.
VALID AT 0Z ON 1/5/1987 DAY 121 DATA TIME 12Z ON 31/5/1987 DAY 151
250 MBS.   BETWEEN LONGS. 0 E - 120 E


10
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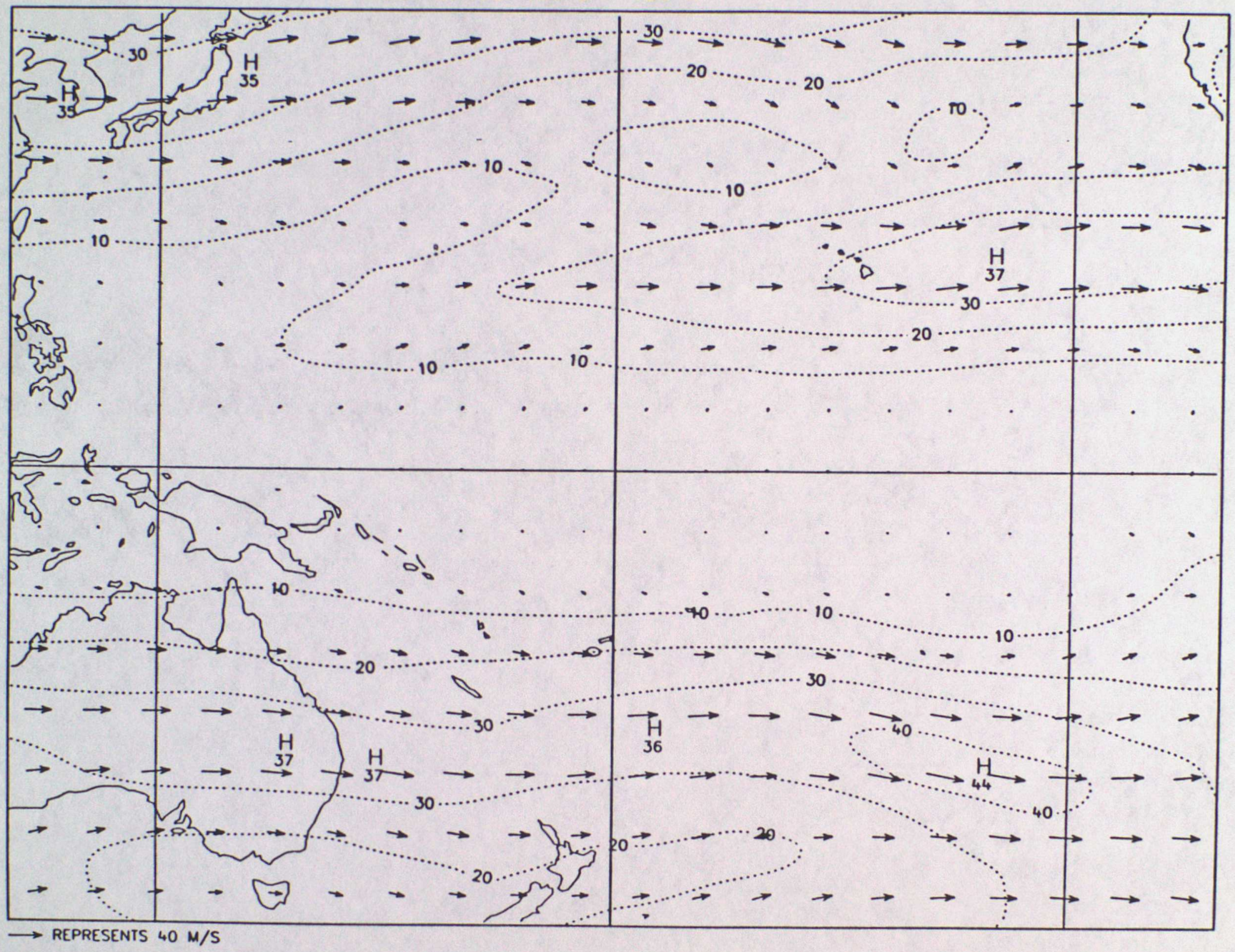
H
28
H
27
H
6
H
4
H
4
H
5
H
5
H
29
H
30
10
20
30
40
→ REPRESENTS 40 M/S

OPERATIONAL ARCHIVE MEANS. MAY 1987
WIND ARROWS AND ISOTACHS BETWEEN LATS. 45 N - 45 S.
VALID AT 0Z ON 1/5/1987 DAY 121 DATA TIME 12Z ON 31/5/1987 DAY 151
250 MBS. BETWEEN LONGS. 120 E - 120 W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H 37
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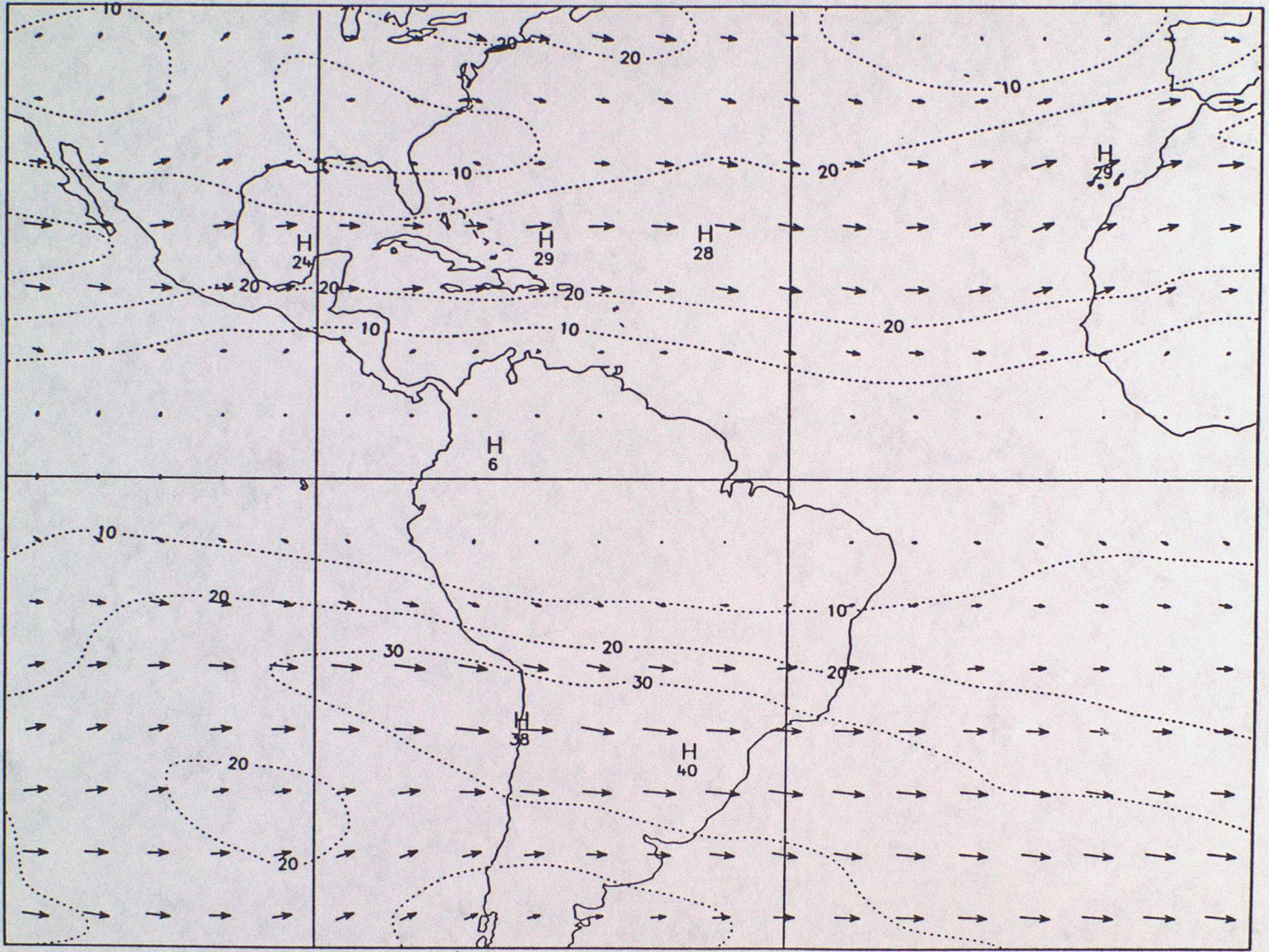
20
30
30
H 36
H 37
H 37
40
H 44
40
30
20
20
20
→ REPRESENTS 40 M/S

OPERATIONAL ARCHIVE MEANS.   MAY   1987
WIND ARROWS AND ISOTACHS BETWEEN LATS. 45 N - 45 S.
VALID AT 0Z ON 1/5/1987 DAY 121 DATA TIME 12Z ON 31/5/1987 DAY 151
250 MBS.   BETWEEN LONGS. 120 W - 0 W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29
H
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H
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10
20
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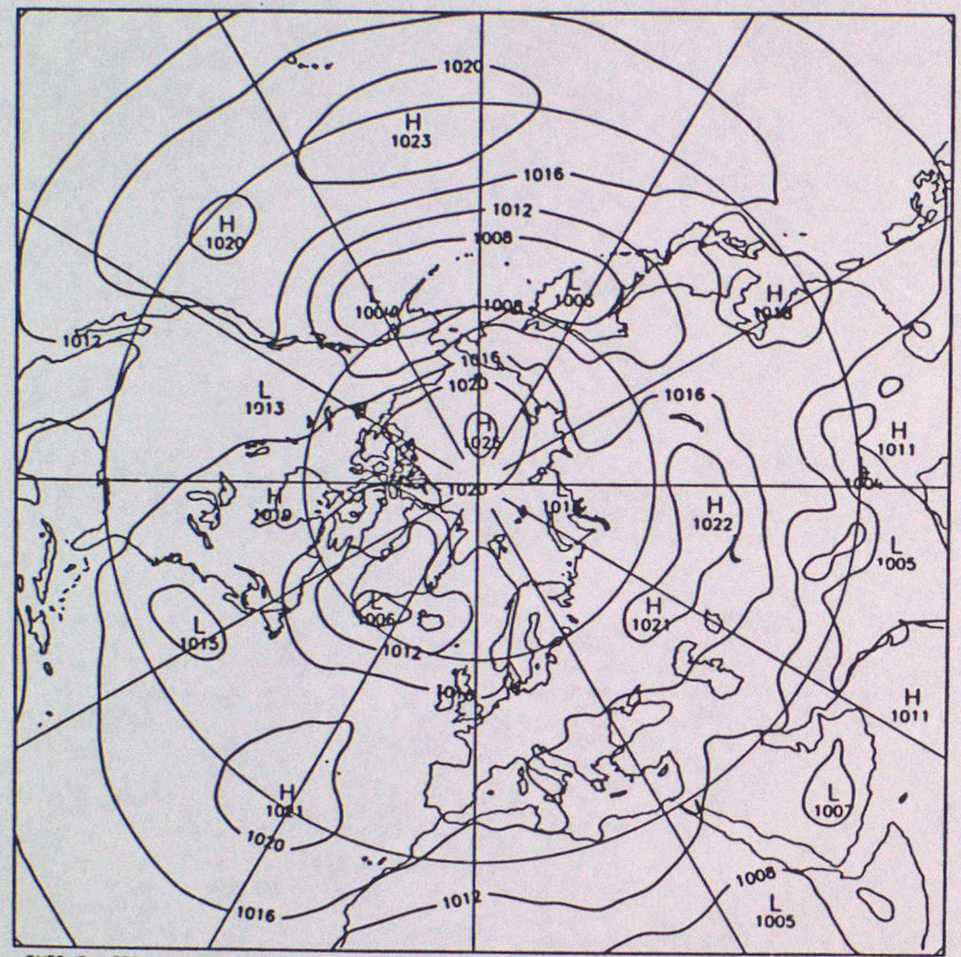
6
10
20
30
H
38
H
40

→ REPRESENTS 40 M/S

MARCH/APRIL/MAY
1987

OPERATIONAL ARCHIVE MEANS. MAR/APR/MAY1987
PMSL
VALID AT 0Z ON 1/3/1987 DAY 60 DATA TIME 12Z ON 31/5/1987 DAY 151
SEA LEVEL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H 1020
L 1006
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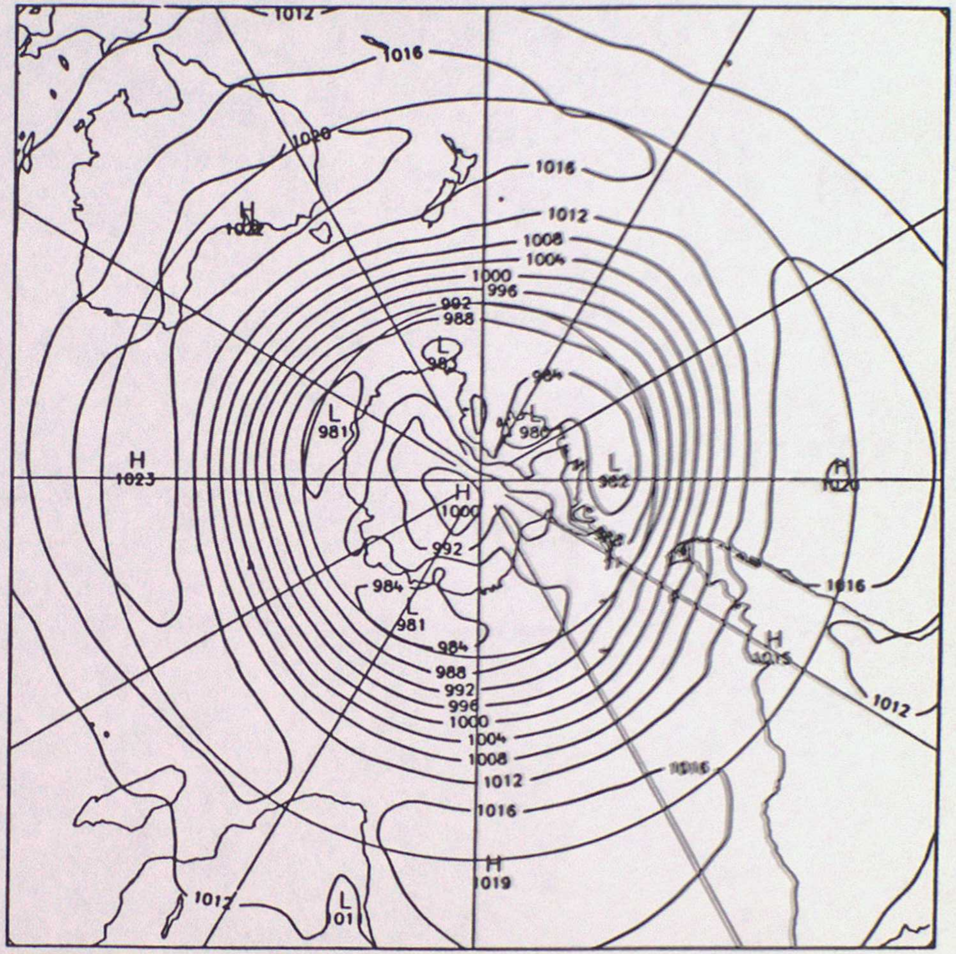
L 1005
L 1015
1006
H 1021
H 1011
L 1007
H 1021
1020
1016
1012
1008
L 1005

CONTOUR INTERVAL: 4 MB UNITS: MB

OPERATIONAL ARCHIVE MEANS. MAR/APR/MAY1987
PMSL
VALID AT 0Z ON 1/3/1987 DAY 60 DATA TIME 12Z ON 31/5/1987 DAY 151
SEA LEVEL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1016
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H 1022
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1008
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1000
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988
L 983
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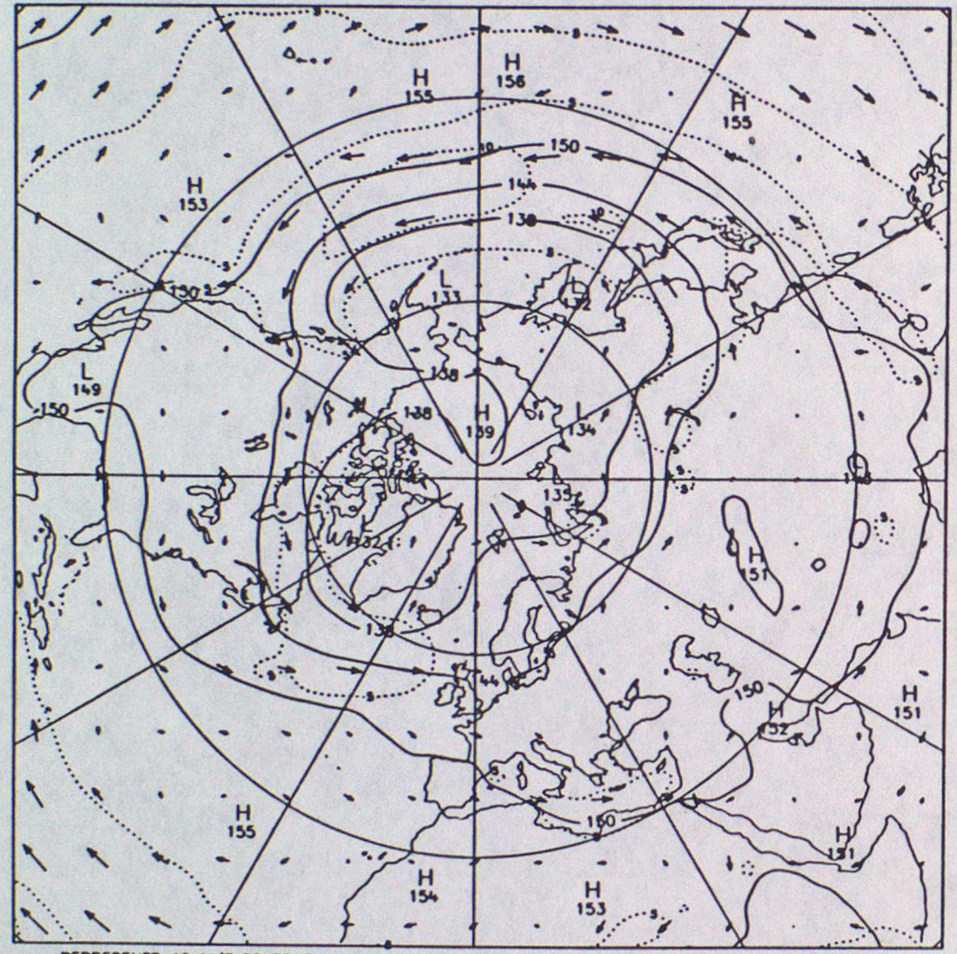
L 981
L 980
L 982
H 1023
H 1000
H 1020
992
984
L 981
1016
H 1015
1012
988
992
996
1000
1004
1008
1012
1016
H 1019
L 1011
1012

CONTOUR INTERVAL: 4 MB UNITS: MB

OPERATIONAL ARCHIVE MEANS.   MAR/APR/MAY1987
HEIGHTS, WIND ARROWS AND ISOTACHS.
VALID AT 0Z ON 1/3/1987 DAY 60 DATA TIME 12Z ON 31/5/1987 DAY 151
LEVEL: 850 MB


H 155
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L 149
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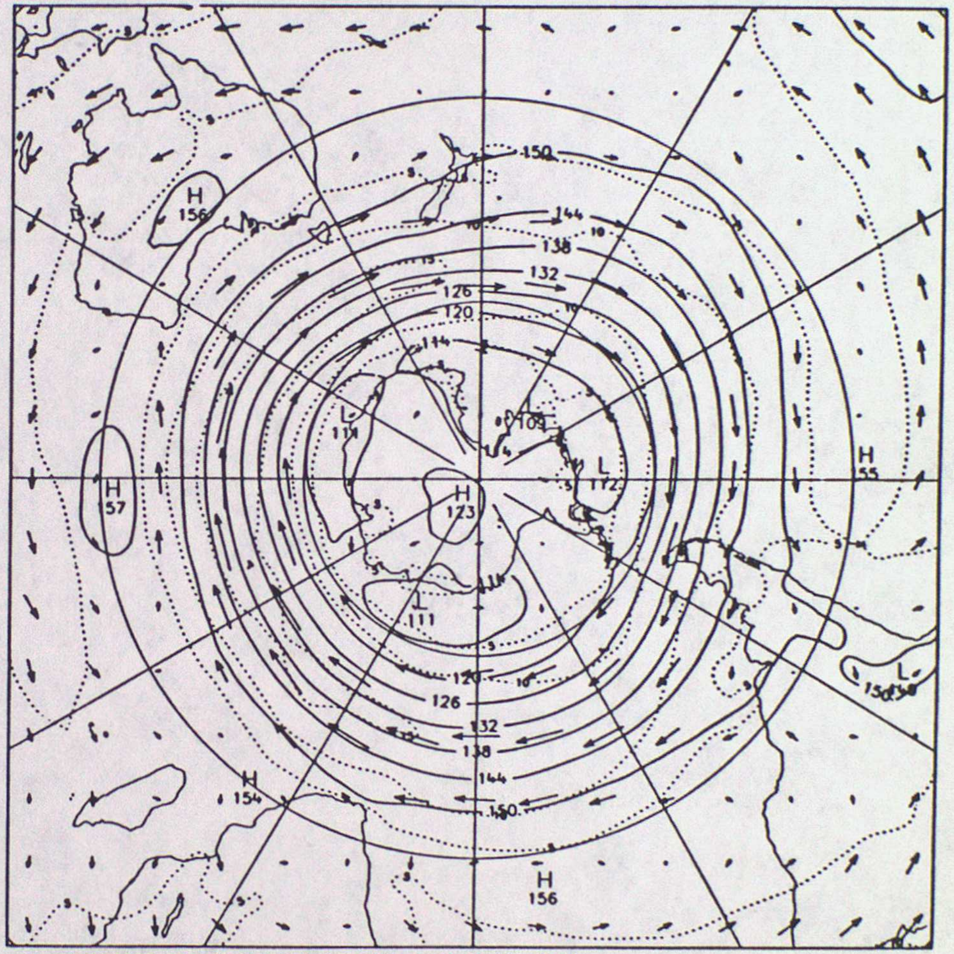
H 139
L 134
135
132
138
151
H 151
150
H 152
H 151
H 155
150
H 154
H 153
H 151

→ REPRESENTS 10 M/S CONTOUR INTERVAL: 60 M UNITS: 10 M

OPERATIONAL ARCHIVE MEANS.   MAR/APR/MAY1987
HEIGHTS, WIND ARROWS AND ISOTACHS.
VALID AT 0Z ON 1/3/1987 DAY 60 DATA TIME 12Z ON 31/5/1987 DAY 151
LEVEL: 850 MB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H 157
H 123
L 112
H 55
L 111
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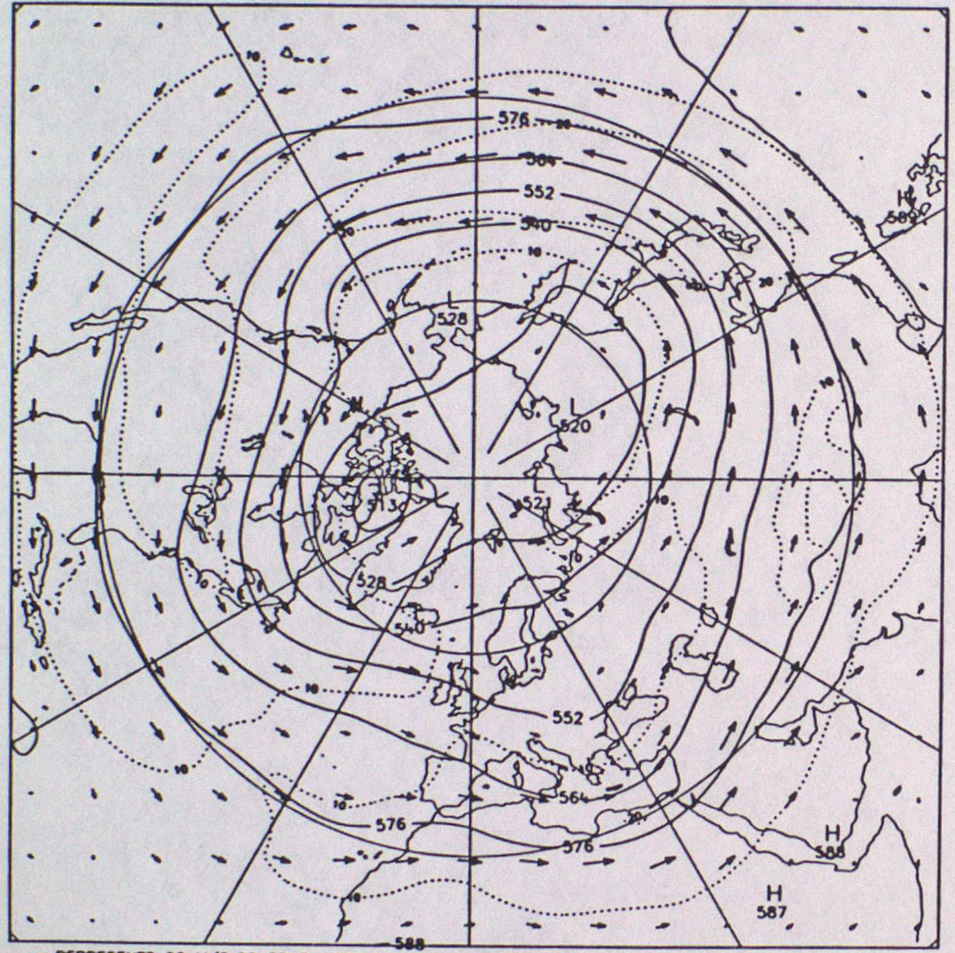
132
138
144
150
L 150
H 154
H 156

→ REPRESENTS 10 M/S CONTOUR INTERVAL: 60 M UNITS: 10 M

OPERATIONAL ARCHIVE MEANS.   MAR/APR/MAY1987
HEIGHTS, WIND ARROWS AND ISOTACHS.
VALID AT 0Z ON 1/3/1987 DAY 60 DATA TIME 12Z ON 31/5/1987 DAY 151
LEVEL: 500 MB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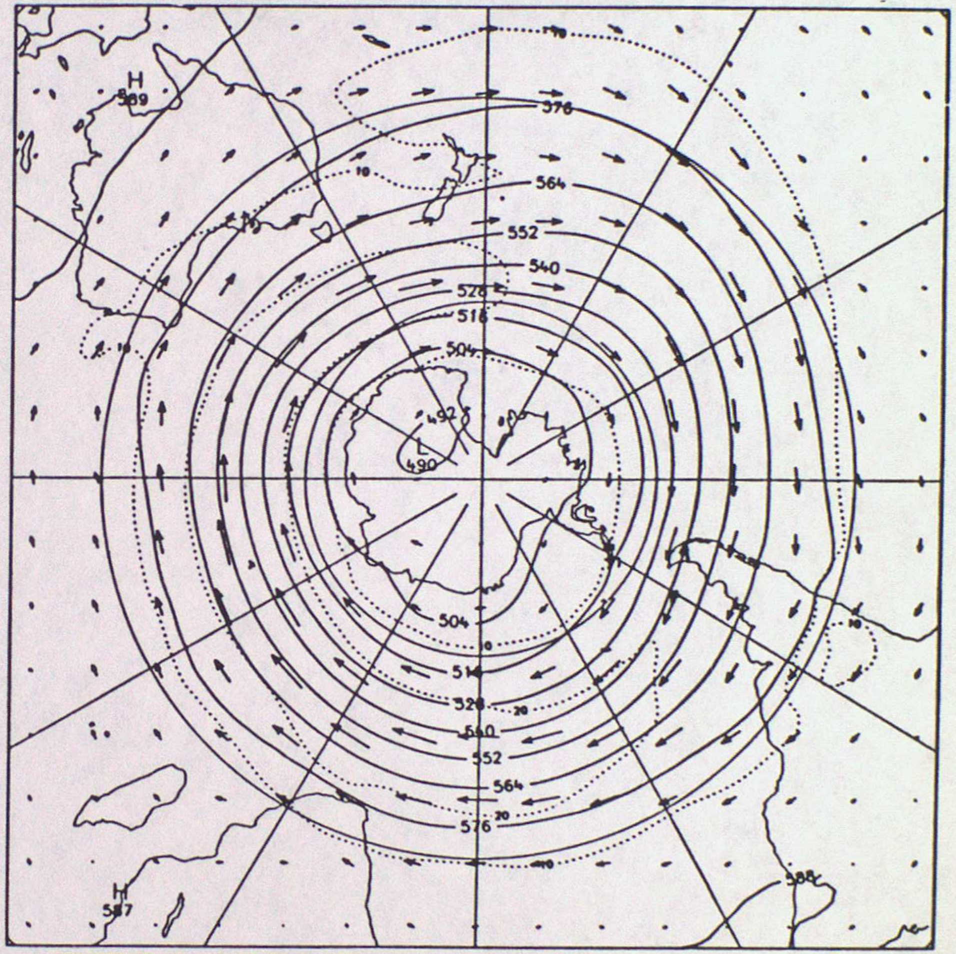
576
20
564
552
540
20
10
L
528
L
520
513
L
521
528
540
552
10
20
564
576
576
10
H
589
H
588
H
587
588

→ REPRESENTS 20 M/S CONTOUR INTERVAL: 120 M   UNITS: 10 M

OPERATIONAL ARCHIVE MEANS.   MAR/APR/MAY1987
HEIGHTS, WIND ARROWS AND ISOTACHS.
VALID AT 0Z ON 1/3/1987 DAY 60 DATA TIME 12Z ON 31/5/1987 DAY 151
LEVEL: 500 MB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H
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576
10
564
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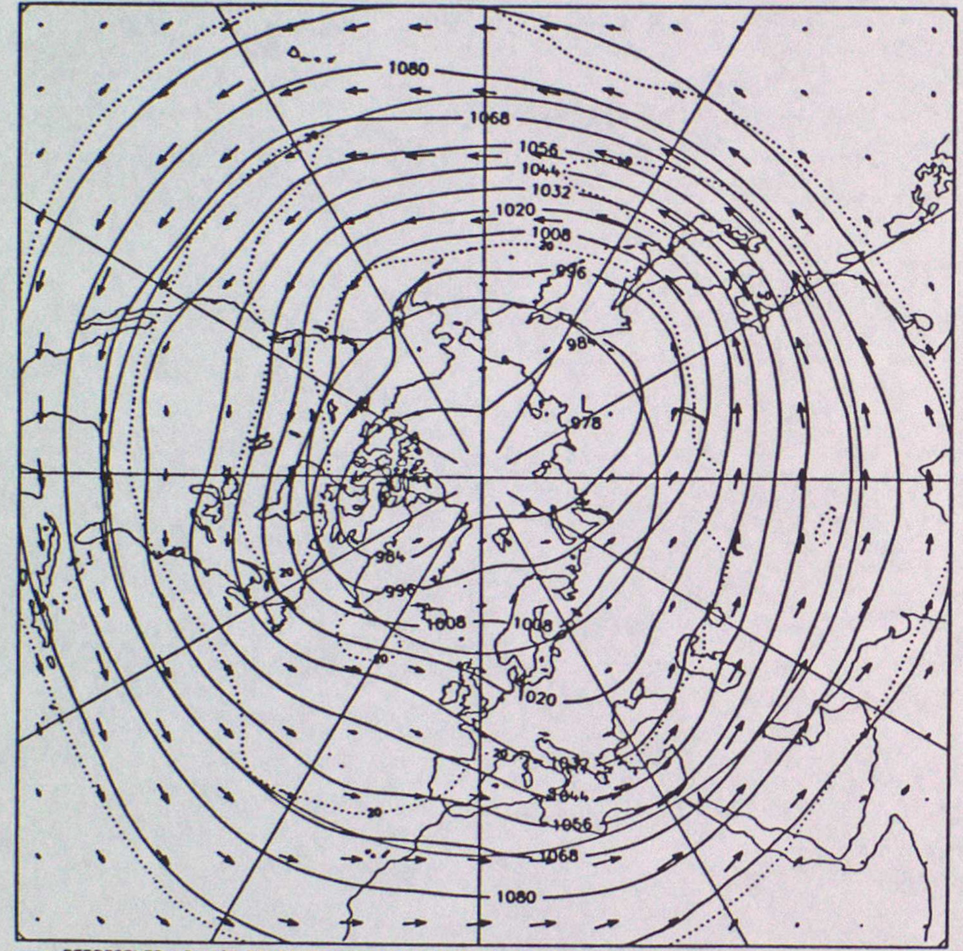
540
528
516
504
492
L
490
504
10
516
528
20
540
552
564
20
576
10
H
587
588

→ REPRESENTS 20 M/S CONTOUR INTERVAL: 120 M   UNITS: 10 M

OPERATIONAL ARCHIVE MEANS.   MAR/APR/MAY1987
HEIGHTS, WIND ARROWS AND ISOTACHS.
VALID AT 0Z ON 1/3/1987 DAY 60 DATA TIME 12Z ON 31/5/1987 DAY 151
LEVEL: 250 MB


1080
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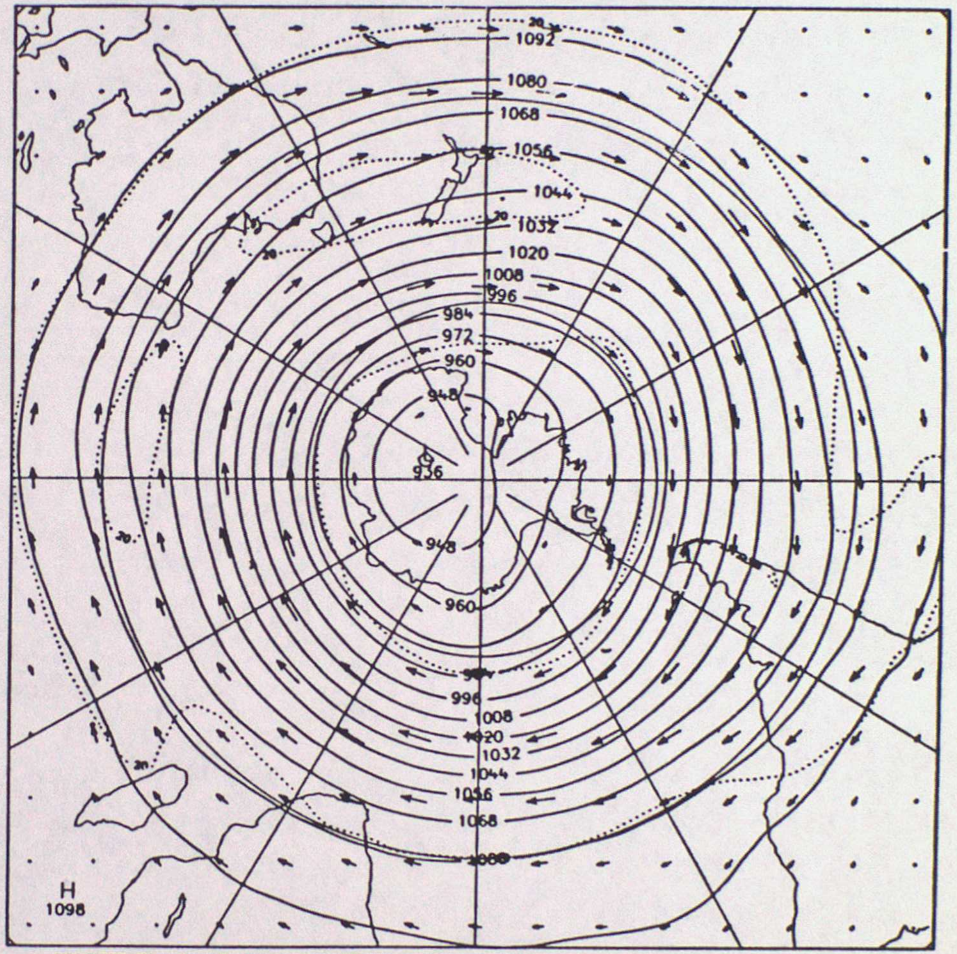
1056
1044
1032
1020
1008
996
98
978
L
984
996
1008
1008
1020
1032
1044
1056
1068
1080
20

→ REPRESENTS 40 M/S CONTOUR INTERVAL: 120 M UNITS: 10 M

OPERATIONAL ARCHIVE MEANS.   MAR/APR/MAY1987
HEIGHTS, WIND ARROWS AND ISOTACHS.
VALID AT 0Z ON 1/3/1987 DAY 60 DATA TIME 12Z ON 31/5/1987 DAY 151
LEVEL: 250 MB


1092
1080
1068
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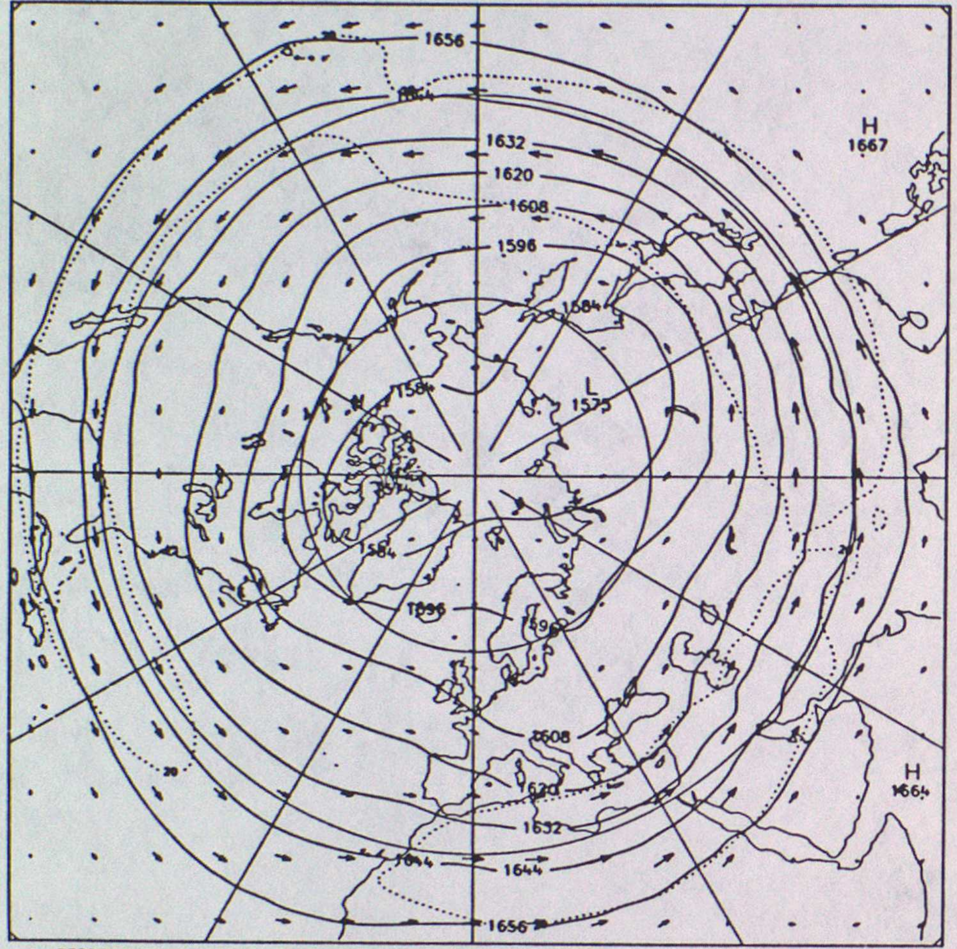
1044
1032
1020
1008
996
984
972
960
948
936
948
960
996
1008
1020
1032
1044
1056
1068
1080
H
1098
20

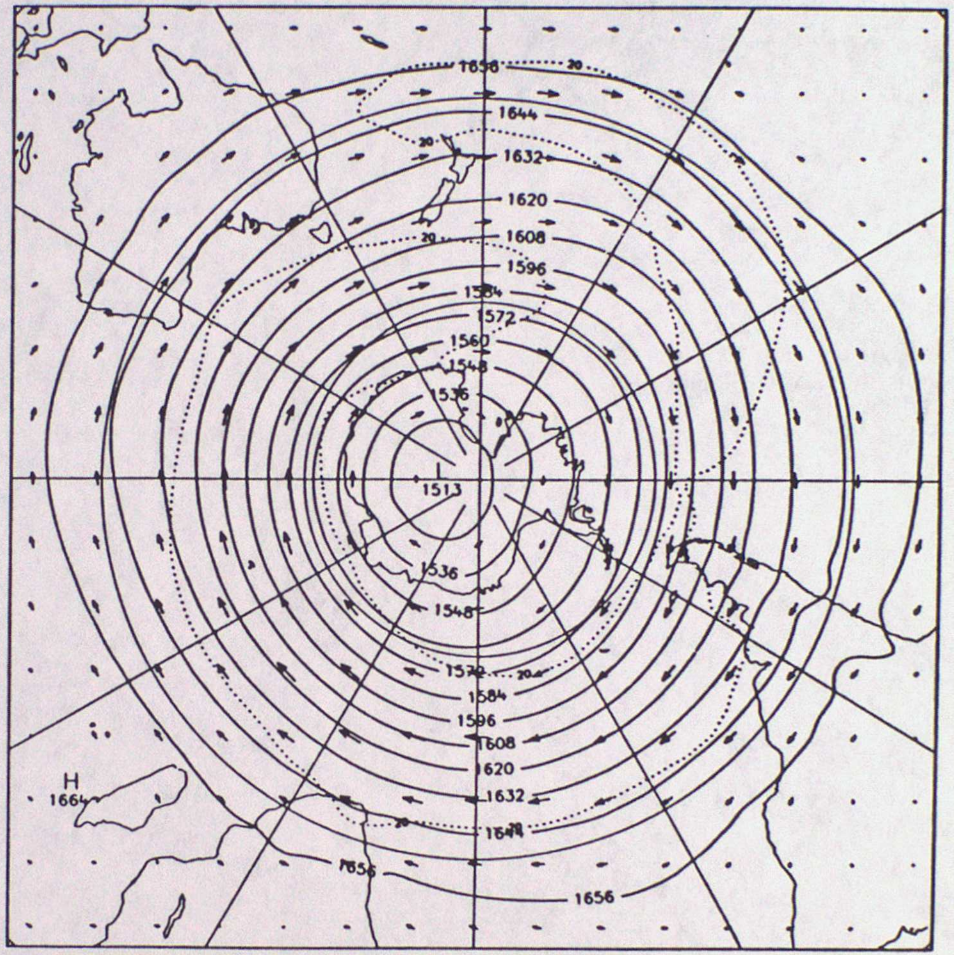
→ REPRESENTS 40 M/S CONTOUR INTERVAL: 120 M UNITS: 10 M

OPERATIONAL ARCHIVE MEANS. MAR/APR/MAY1987
HEIGHTS, WIND ARROWS AND ISOTACHS.
VALID AT 0Z ON 1/3/1987 DAY 60 DATA TIME 12Z ON 31/5/1987 DAY 151
LEVEL: 100 MB


1656
1644
1632
1620
1608
1596
1584
L
1575
H
1667
H
1664
20
10

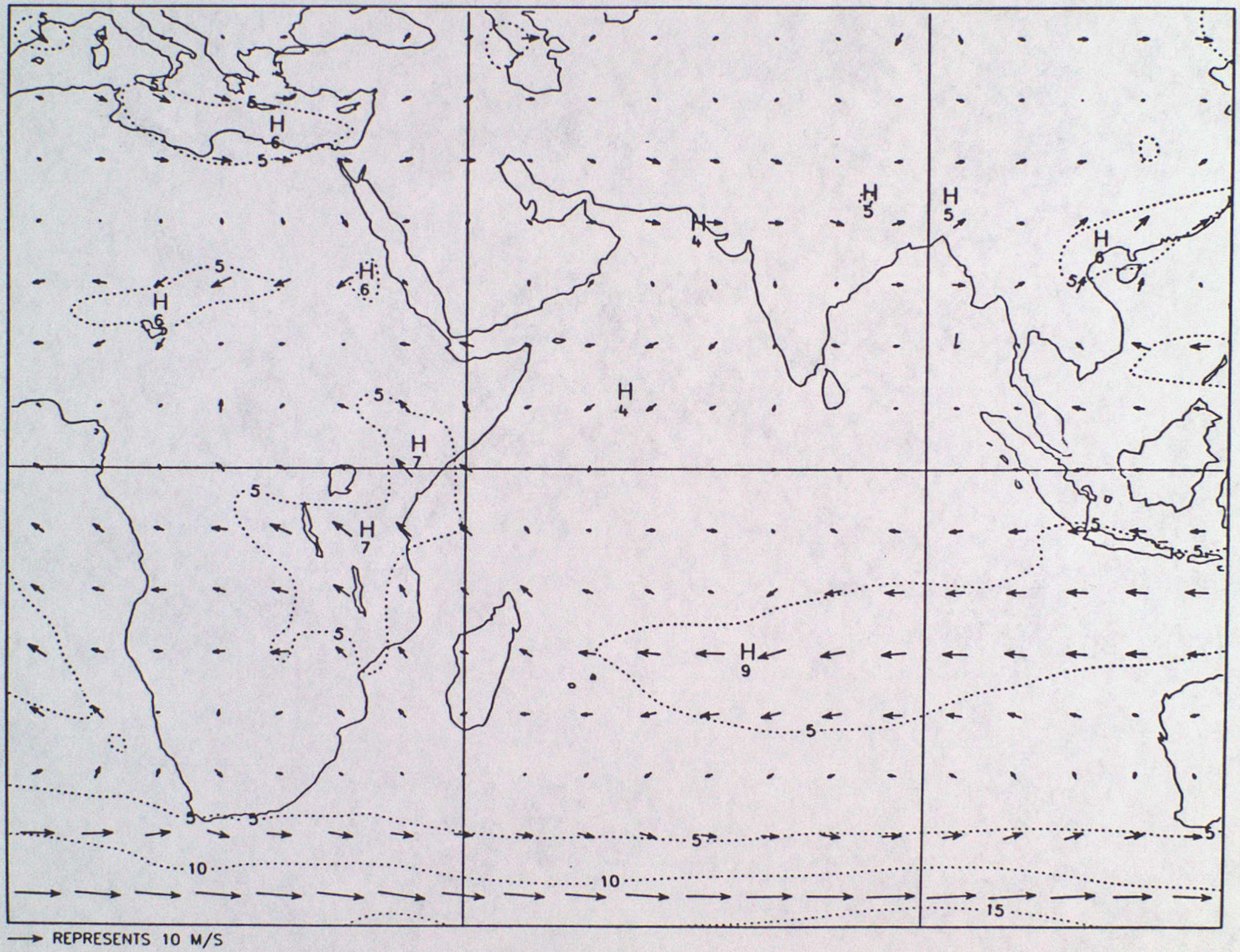
→ REPRESENTS 40 M/S CONTOUR INTERVAL: 120 M UNITS: 10 M

OPERATIONAL ARCHIVE MEANS. MAR/APR/MAY1987
HEIGHTS, WIND ARROWS AND ISOTACHS.
VALID AT 0Z ON 1/3/1987 DAY 60 DATA TIME 12Z ON 31/5/1987 DAY 151
LEVEL: 100 MB

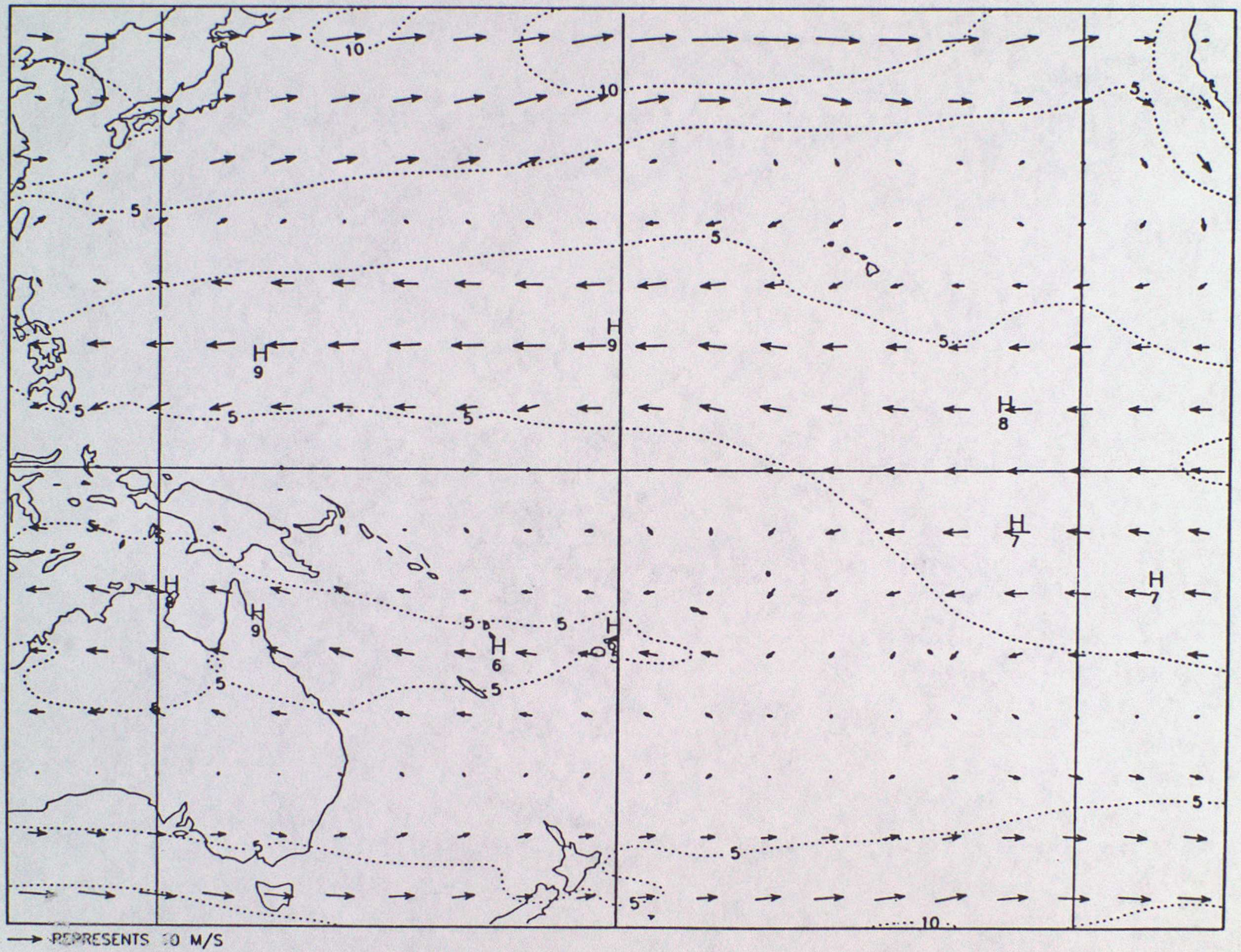

1656
1644
1632
1620
1608
1596
1584
1572
1560
1548
1536
L
1513
H
1664
20

→ REPRESENTS 40 M/S CONTOUR INTERVAL: 120 M UNITS: 10 M

OPERATIONAL ARCHIVE MEANS. MAR/APR/MAY1987
WIND ARROWS AND ISOTACHS BETWEEN LATS. 45 N - 45 S.
VALID AT 0Z ON 1/3/1987 DAY 60 DATA TIME 12Z ON 31/5/1987 DAY 151
850 MBS. BETWEEN LONGS. 0 E - 120 E


H
6
H
5
H
4
L
H
7
H
9
5
10
15
→ REPRESENTS 10 M/S

OPERATIONAL ARCHIVE MEANS.   MAR/APR/MAY1987
WIND ARROWS AND ISOTACHS   BETWEEN LATS. 45 N - 45 S.
VALID AT   0Z ON 1/3/1987 DAY 60   DATA TIME 12Z ON 31/5/1987 DAY 151
850 MBS.   BETWEEN LONGS. 120 E - 120 W


10
10
5
5
5
5
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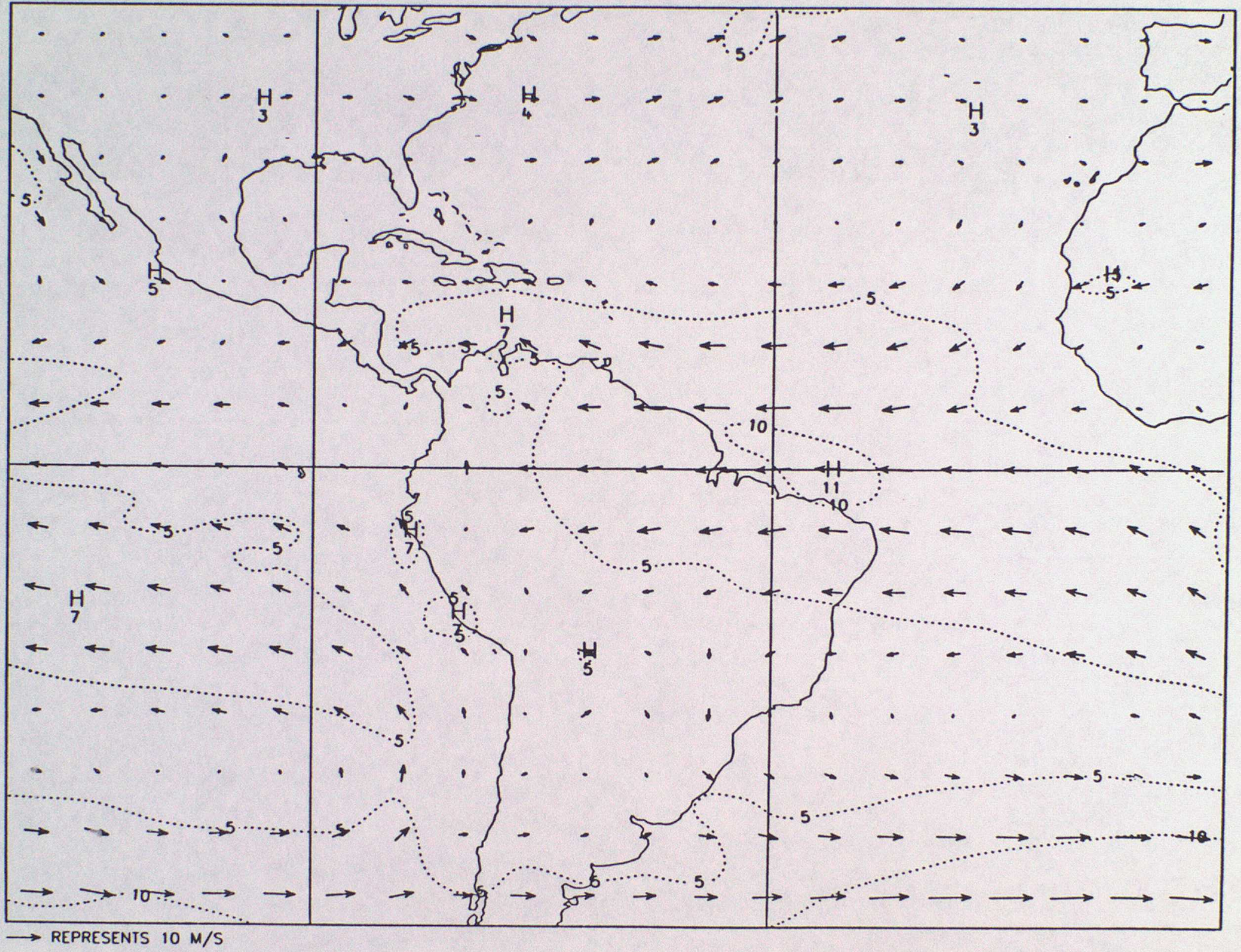
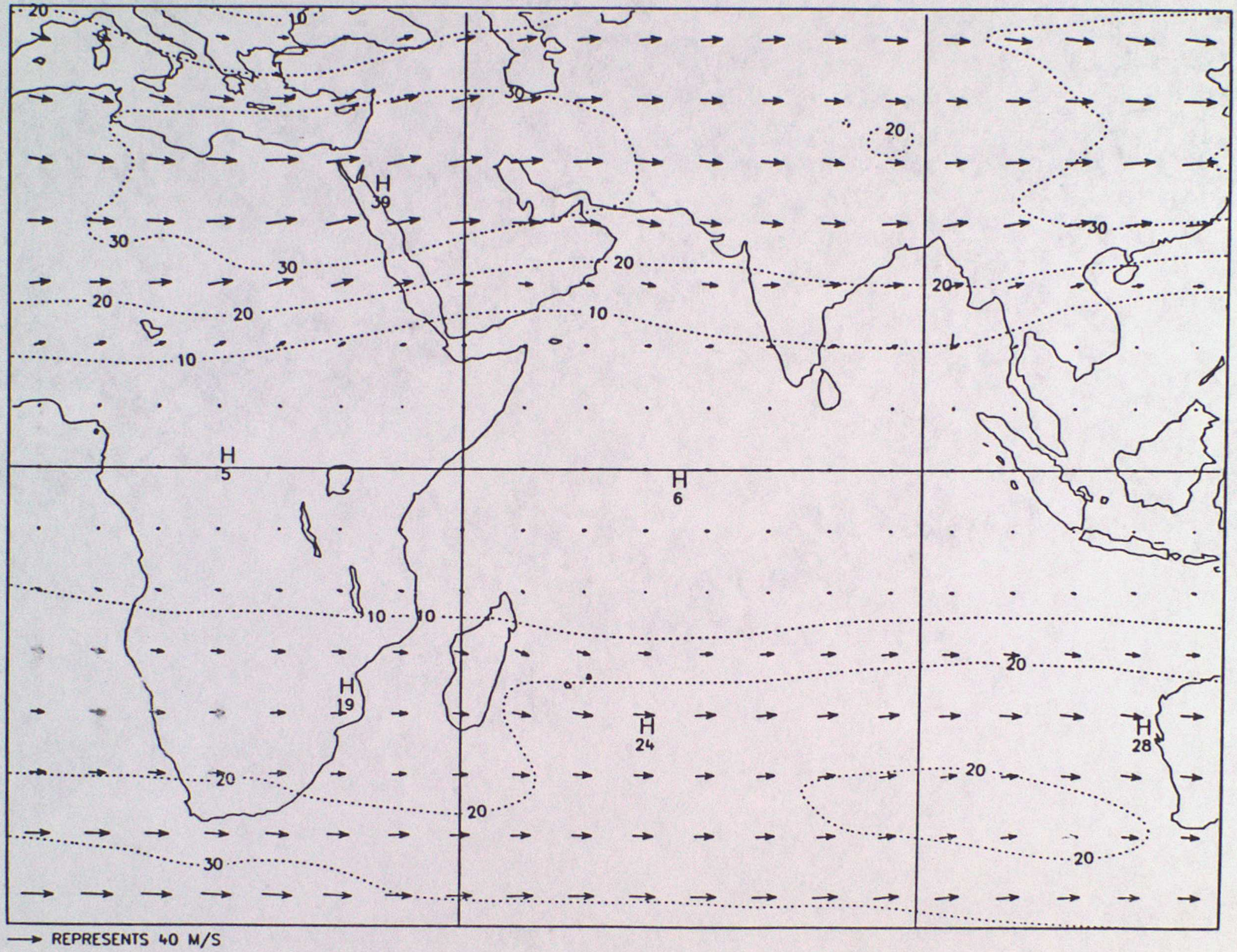
5
5
5
5
5
5
5
5
5
5
5
10
H 9
H 9
H 8
H 7
H 7
H 8
H 9
H 6
H 9
→ REPRESENTS 10 M/S

OPERATIONAL ARCHIVE MEANS.   MAR/APR/MAY1987
WIND ARROWS AND ISOTACHS   BETWEEN LATS. 45 N - 45 S.
VALID AT   0Z ON 1/3/1987 DAY 60   DATA TIME 12Z ON 31/5/1987 DAY 151
850 MBS.   BETWEEN LONGS. 120 W - 0 W

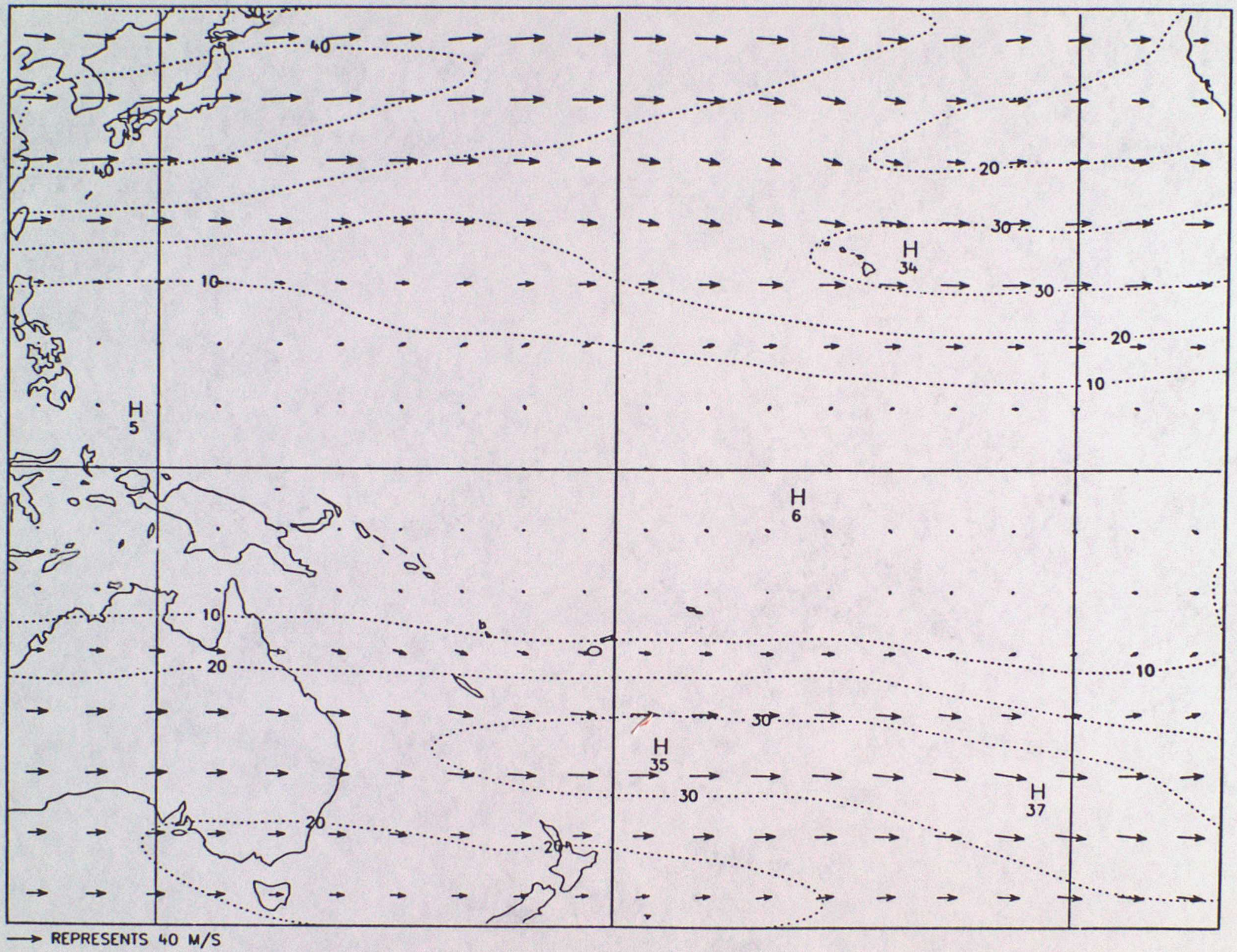

H 3
H 4
H 3
H 5
H 5
H 7
H 11
10
H 7
H 7
H 7
H 5
5
10
→ REPRESENTS 10 M/S

OPERATIONAL ARCHIVE MEANS.   MAR/APR/MAY1987
WIND ARROWS AND ISOTACHS   BETWEEN LATS. 45 N - 45 S.
VALID AT   0Z ON 1/3/1987 DAY 60   DATA TIME 12Z ON 31/5/1987 DAY 151
250 MBS.   BETWEEN LONGS. 0 E - 120 E


20
10
30
20
H
39
30
30
30
20
20
20
20
10
10
H
5
H
6
10
10
20
H
19
H
24
H
28
20
20
20
30
20

→ REPRESENTS 40 M/S

OPERATIONAL ARCHIVE MEANS.   MAR/APR/MAY1987
WIND ARROWS AND ISOTACHS   BETWEEN LATS. 45 N - 45 S.
VALID AT   0Z ON 1/3/1987 DAY 60   DATA TIME 12Z ON 31/5/1987 DAY 151
250 MBS.   BETWEEN LONGS. 120 E - 120 W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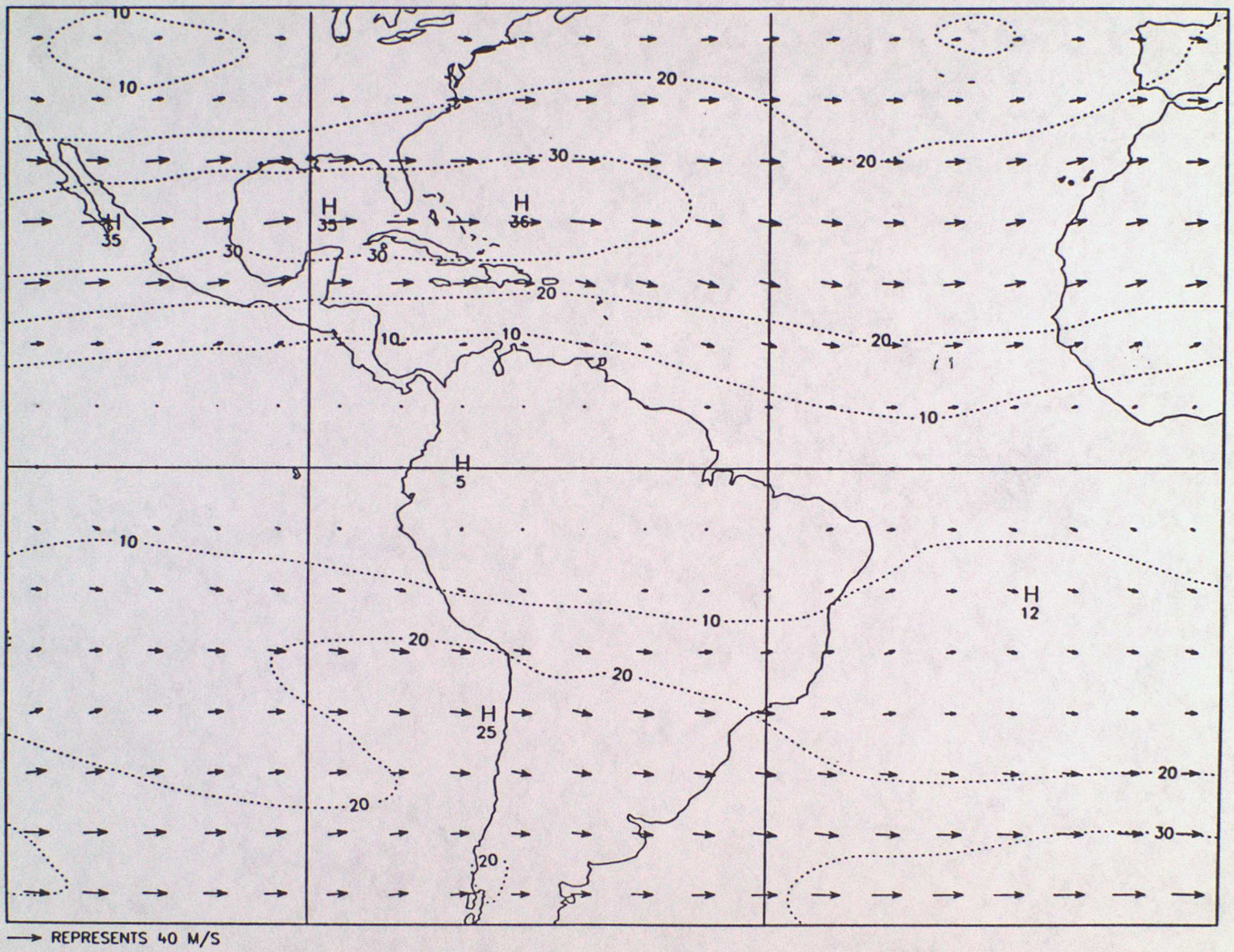
45
40
20
30
H
34
30
10
20
10
H
5
H
6
10
10
20
30
H
35
30
H
37
20
20
→ REPRESENTS 40 M/S

OPERATIONAL ARCHIVE MEANS. MAR/APR/MAY1987
WIND ARROWS AND ISOTACHS BETWEEN LATS. 45 N - 45 S.
VALID AT 0Z ON 1/3/1987 DAY 60 DATA TIME 12Z ON 31/5/1987 DAY 151
250 MBS. BETWEEN LONGS. 120 W - 0 W


10
10
20
30
H 35
H 35
H 36
30
30
20
10
10
20
20
10
H 5
10
H 12
10
20
20
H 25
20
20
20
30
→ REPRESENTS 40 M/S